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CASE 4

MINERA YANACOCHA GOLD MINE PROJECT, PERU

Located high in the Andes of northern Peru, Minera Yanacocha (Yanacocha) is the one of the largest and most profitable gold mines in the world.[173] Yanacocha is a joint venture of Newmont Mining Corporation (51 percent), Compañía de Minas Buenaventura of Peru (44 percent), and the International Finance Corporation (IFC), the private-sector lending arm of the World Bank Group (5 percent). Yanacocha is a linchpin asset for each of its principal owners. For Newmont, the world's largest gold producer, Yanacocha is the crown jewel of its global operations, and represents 18 percent of its total global reserves.[174] The mine is even more important to Buenaventura—it is by far that company's most significant asset, representing 94 percent of the company's reserves.[175] And while Yanacocha does not represent a large percentage of the IFC's overall portfolio, it is the IFC's largest investment in the mining sector, and an important test of IFC's assertion that it can help ensure that the mining projects it finances deliver sustainable and equitable development benefits to their host communities.

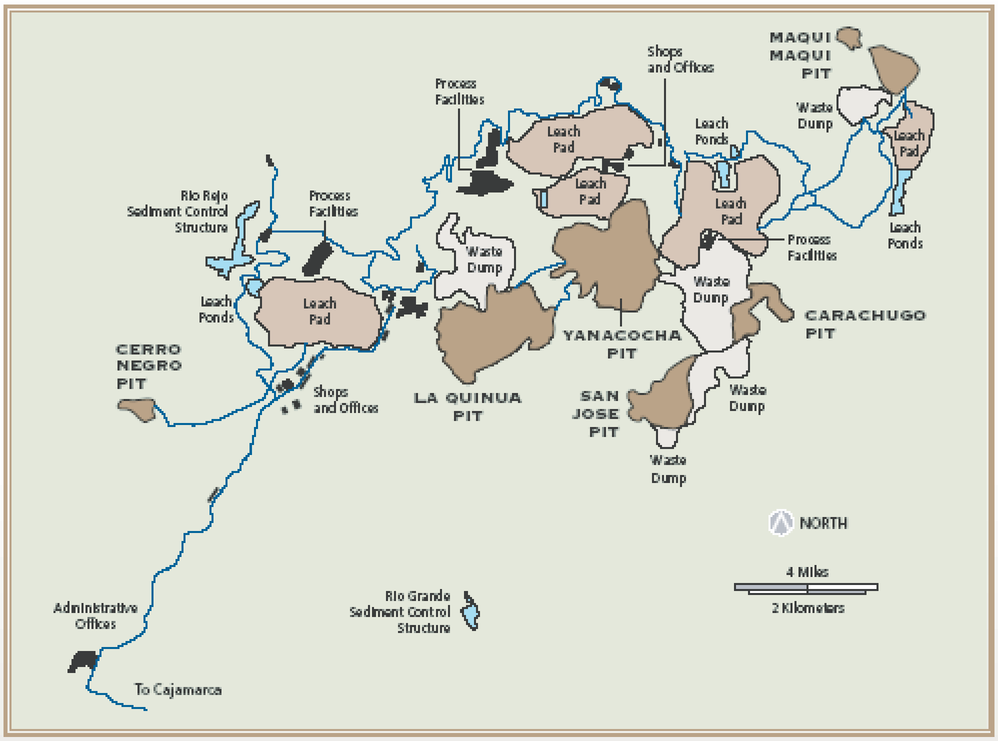
Yanacocha extracts massive quantities of gold from ore using a "cyanide heap leach" process. Heap leaching involves piling crushed ore in enormous heaps and spraying it with a dilute cyanide solution, which percolates through the pile and bonds with tiny flecks of gold. The solution is then collected in a rubber pad beneath the heap, and the gold is separated from the effluent in a processing plant. While cyanide heap leaching is a cheap and effective means for extracting minute amounts of gold from low-grade ore, it carries a high risk for contaminating nearby water sources with cyanide by-products and other toxic chemicals.

Everything about the Yanacocha facility is titanic in scale. Its six open-pit mines, five leach pads, and associated processing facilities sprawl across 160 square kilometers, five separate mountains, and four distinct watersheds (see Figures 6 and 7). Yet these existing facilities occupy only a small portion of the 1,725-square-kilometer concession on which Yanacocha owns exploration and development rights (see Figure 8).[176] The project has excavated about

FIGURE 6 **LOCATION OF OPERATIONS IN PERU**

Source: September 2005 Information Handbook — Newmont

FIGURE 7 | **THE SCALE OF YANACOCHA**



Source: September 2005 Information Handbook — Newmont

570 million tons of earth so far, and will most likely move a billion tons before it closes.[177]

Yanacocha's wealth is as enormous as its facilities. When Yanacocha began operating in 1992, the company believed that it held only modest reserves that would take 5 or 6 years to develop. After a series of extraordinarily rich discoveries, however, the mine has actually produced more than 19 million ounces of gold—worth more than US $7 billion.[178] In 2004 alone, the mine produced 3.1 million ounces.[179] With the addition of 8.7 million ounces from the proposed Minas Congas pit, Yanacocha closed in 2004 with 32.2 million ounces of reserves.[180] At US $445 per ounce, the average price of gold in 2005,[181] these reserves are worth about US $14.2 billion. And this does not include the resources of several other areas that Yanacocha is actively considering developing. The company anticipates it will continue to profitably mine the concession for the next 35 to 50 years.

Yanacocha has also been a significant source of public revenue. In 2003, Minera Yanacocha paid more than $140 million in taxes, half of which was earmarked to be distributed to the local government under Peru's mining law.

COMMUNITY OPPOSITION

When Yanacocha commenced operations in 1992, it was a substantially smaller project than it is now. In its first year of operations, the project produced only 81,000 ounces of gold (compared to 3.1 million ounces in 2005). In the early stages of the project, few if any residents of the Cajamarca valley anticipated the potential for intense conflict between industrial-scale mining operations and the region's traditional foundations of agricultural and dairy farming, and there was no organized opposition to the project.[182] Rather, many residents were hopeful that Yanacocha would bring much-needed jobs and improved roads.

FIGURE 8 **MAP OF YANACOCHA EXPLORATION AND DEVELOPMENT RIGHTS**

Source: September 2005 Information Handbook — Newmont

However, as the mine dramatically expanded in scale, it came to exert a kind of gravitational force on all spheres of life in the area. By 1998, the mine was causing significant tensions between the company and the community. While many residents in the community believed that the mine was delivering substantial economic benefits, many others complained that it was causing considerable economic, environmental, and social harm to the region. The mine's industrial operations were widely seen as undermining the region's traditional agricultural and pastoral identity, and disrupting traditional social structures and land and labor markets. With a workforce of more than 7,000 employees (including subcontractors), an enormous consumer presence, and other extensive economic activity, the economic clout of Yanacocha appeared to overwhelm the community. Moreover, many residents blamed the mine for creating class divisions between the thousands of *campesinos* who had landed well-paying jobs with the mine, and the tens of thousands who had not.[183] In the town of Cajamarca (population 120,000), residents complained that the immigration of people seeking employment brought overcrowding, rising crime, violence, alcoholism, and prostitution. In the surrounding rural areas, farmers and ranchers alleged that Yanacocha engaged in coercive land purchases, and that decreasing water quality and quantity in local streams and irrigation ditches had reduced their yields. Throughout the region, residents objected to the danger and nuisance of the stream of large trucks going to and from the mine. Given these negative impacts, and the extraordinary riches that Yanacocha was taking from the region, many residents became convinced that the company was not investing its fair share in the affected communities.

Public discontent was exacerbated by the perception that Yanacocha enjoyed unrivaled economic and political clout, and chose to exercise its power in an arrogant, unilateral, and opaque manner.[184] In many minds, the company did not act with appropriate candor, responsibility, or deference to traditional decision-making processes, and was widely criticized for its lack of transparency and failure to consult with affected communities. Local authorities came to believe that Yanacocha did not respect their traditional role in local decision making, and did not value their inputs. And the public came to believe that the mine preferred to shun disclosure and consultation in favor of backroom deals. Even where Yanacocha did provide assistance to affected communities, its efforts were often dismissed because it unilaterally decided what to do for the communities, rather than seeking to identify and incorporate community preferences through meaningful dialogue.[185]

In June 2000, an accident involving the transportation of mercury, a by-product of the mining process, brought simmering discontent with Yanacocha to full boil. A mine contractor spilled 330 pounds of mercury along a stretch of road through the towns of Choropampa, Magdalena, and San Juan. Children in the villages collected and played with the luminous liquid metal. Many adults, believing that the mercury was mixed with gold, brought it home and even cooked it on their stoves.[186] Over 1,000 villagers claimed to suffer from acute mercury poisoning or other ill effects from the contact with the mercury, including skin rashes, vomiting, vision problems, nervous system disorders, respiratory ailments, and kidney problems.[187] The mine delayed reporting the accident to Peruvian authorities,[188] and allegedly exacerbated the public health impact of the spill by paying villagers to collect the spilled mercury without providing proper protective clothing.[189]

In March 2001, hundreds of residents of Choropampa and surrounding areas protested the company's inadequate response to the health problems in their community by blockading the road between Cajamarca and Lima—thereby preventing truck traffic between the capital and the mine.[190] Ultimately, an independent review commissioned by the IFC concluded that Yanacocha bore considerable responsibility for failing to implement appropriate policies for the handling and transporting hazardous wastes from the mine.[191] A group of people who were sickened by the spill have sued Newmont in U.S. court, seeking compensation for their ailments. Moreover, local residents often cite the accident at Choropampa as an example of Yanacocha's indifference to the negative impacts of the mine, and it remains an ongoing source of conflict between the company and surrounding communities.

FURTHER CONTROVERSY OVER THE PROPOSED EXPANSION AT CERRO QUILISH

Even as its relationship with the surrounding communities deteriorated, the company's ambitions for the Yanacocha mine continued to grow. A critical element of Yanacocha's expansion was its plan to mine Cerro Quilish, a 3.7-million-ounce deposit within the Yanacocha concession.[192] However, as the communities came to believe that existing operations were poisoning the local watercourses, and as they grew increasingly skeptical of the company's assurances that mining Quilish would not adversely affect water quality, they became concerned with the prospect of Quilish's being developed. For many in the region, Quilish was considered to be sacred land, and the primary source of freshwater for Cajamarca and some of the surrounding communities and farms. In October 2000, Cajamarca passed a municipal ordinance declaring Cerro Quilish to be a protected area and off-limits to mineral exploration. In turn, Minera Yanacocha sued the city to overturn the declaration and preserve its rights to explore and expand.[193] In 2003, the Peruvian Supreme Court ruled in the Yanacocha's favor, holding that the declaration exceeded the authority of the municipal government.[194] Nevertheless, the company maintained that it would not try to expand into Quilish over community opposition. These assurances did not assuage concerns about the development of Quilish, and the prospect that Yanacocha might develop Quilish lingered as an ongoing point of contention in the relationship between the company and its host communities.

In September 2004, Yanacocha obtained a permit from the Ministry of Energy and Mines to begin exploring Quilish, and moved its drilling equipment onto the site. The public reaction was swift and intense. On September 2, hundreds of *campesinos* blockaded the road from Cajamarca to the mine. The government responded by deploying several hundred armed police officers. Many protestors were arrested, including a number of women, children, and elders.[195] The blockade forced Yanacocha to helicopter its workers to the mine, and to scale back operations. On September 15, the protests culminated in a region-wide strike that included a mass mobilization of approximately 10,000 people in the public square in Cajamarca. The blockade was relinquished, and protests were quelled two days later, after local leaders and representatives of the Ministry of Mines negotiated an agreement with Yanacocha. In early November, the company publicly apologized for its actions, formally requested that the Ministry revoke its permit to explore Quilish, and removed the Quilish project from its operations plans.[196]

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FINANCIAL IMPACTS

The indefinite delay in developing the Quilish reserves is probably the most severe financial impact of the conflict so far. Yanacocha had hoped to begin exploiting Quilish's reserves in 2007 to partially offset the production depletion of its existing pits.[197] But in part because the development of Quilish has been delayed indefinitely, the company now says that Yanacocha's production may fall 35 percent or more in two years.[198] Assuming a gold price of US $603 per ounce (the average price in 2006), Quilish's 3.7 million ounces of reserves are worth about US $2.23 billion.[199] If these reserves could be recovered at the same production costs of $145 per ounce as the rest of Yanacocha, this amounts to more than US $1.69 billion in lost earnings for the company.[200] For Buenaventura, the Quilish reserves represent more than 20 percent of the company's total gold reserves.[201] For Newmont, the loss of Quilish represents only about a 2 percent decrease in its overall reserves—though Yanacocha is one of Newmont's lowest-cost and most profitable producers.[202]

The conflicts between Yanacocha and the community have placed more than just the Quilish reserves in jeopardy. In the current political environment, any proposed expansion of the mine will face heightened scrutiny. There has been strong public resistance to the exploration and development of portions of the San Cirilo deposit.[203] And Yanacocha's other proposed developments—Chaquicocha (slated to begin production in 2006), Corimayo (2010), and Minas Conga (2011)—will face similar scrutiny. Together, these deposits hold an estimated 14.5 million ounces of reserves, worth US $8.74 billion at average 2006 prices.[204] Therefore, securing community consent to explore and develop these deposits is a long-term imperative for Yanacocha, as its continued viability ultimately depends upon its ability to replenish depleted assets. In the existing political environment, it is difficult to see how Yanacocha will obtain that permission.

Yanacocha's troubles in the Cajamarca valley have spilled over to other Newmont–Buenaventura projects in the region. Two months after the conflict over Cerro Quilish, a group of local *campesinos* entered a prospecting camp at La Zanja, a planned open-pit mine six hours from Cajamarca, and destroyed rock samples and equipment.[205] As a result, Newmont and Buenaventura are also reevaluating this mine proposal, which has reserves of 563,000 ounces of gold and 3.8 million ounces of silver.[206] Worse, the conflict in Yanacocha has set the tone for a number of confrontations between mining companies and their host communities throughout Peru (see Box 5). According to Father Marco Arana, a leader of the Cerro Quilish protests: "[I]f Yanacocha does things better, it will open the door to all mining projects in the north of Peru. If it doesn't, it will close the door to these projects."[207]

Yanacocha's poor relationships with local communities have also increased Newmont's share price volatility. Newmont's stock fell 7 percent during the two weeks of protest over Cerro Quilish. Investor concerns over the situation in Yanacocha, and another Newmont mine in Indonesia, contributed to Newmont's loss of 8 percent in 2004, despite huge run-ups in the price of gold through the year. Reflecting on Newmont's 2004 performance, a Bear Stearns analyst commented: "[T]here's been a lot of noise over the past three months about [Newmont's] Indonesian and Peruvian operations.... [I]t's been a lot of environmental and local discourse that has kind of restrained Newmont's performance."[208] Some of Newmont's large institutional investors—such as the New York State Common Retirement Fund—have concurred, and have begun to press the company on its environmental and social practices.[209]

CONCLUSION

The central lesson of the Yanacocha case is that for large-scale, long-term projects, community consent is a life-cycle issue. While securing a "social license to operate" during project preparation is critical, that license is only temporary and contingent; it must be constantly renewed and is always subject to revocation during implementation.

When Yanacocha began operations in 1993, it enjoyed substantial support within the surrounding communities. Many local residents believed that the project could supplement the region's traditional economic activity, and bring well-paying jobs and improved infrastructure. But few, if any, residents anticipated how the mine would dominate the valley's economic, social, and political life. Over time, as the project grew in scale and its negative impacts began to overshadow its benefits in the minds of many residents, early support for the mine eroded into suspicion, recrimination, and ultimately, opposition. Yet Yanacocha proved unable to meet the public's expectations of transparency, meaningful participation in decision making, and good corporate citizenship. These accumulated grievances ultimately found expression in the blockades and mass mobilizations that prevented the exploration of Cerro Quilish.

As in the Esquel case, it is not clear that even a perfectly harmonious relationship with the surrounding communities would have allowed Yanacocha to secure consent to mine Cerro Quilish. Given Quilish's sacred status and its importance as a watershed, local communities would have had strong reservations about its development under any circumstances. But it is clear, at least in retrospect, that Yanacocha would have been well advised to fully explore the communities' concerns about the development of Quilish, respect their preferences regarding its development, and (if necessary) redirect its ambitions for expansion to other, mutually agreeable areas. Box 5 provides an overview of the consequences of broader governance challenges to the Peruvian mining sector.

BOX 5 GOVERNANCE, POLITICS, AND CONFLICT: THE CASE OF THE MINING SECTOR IN PERU

Conflicts between project sponsors and their host communities generally arise out of very specific and localized grievances, but they rarely occur in isolation. Poor governance, or the government's inability to resolve community complaints in a politically acceptable manner, can create the conditions in which similar conflicts may arise in a number of different communities. And conflict in one community can, in turn, have a demonstration effect that reverberates through the regional or even national political culture. Eventually, a tipping point may be reached in which a company's—or even an entire industry's—ability to do business is fundamentally impaired.

This kind of transformation of the national investment climate recently occurred in Peru's mining sector. Peruvian mining has undergone a historic boom since the early 1990s, when the government privatized and liberalized the industry to facilitate foreign investment. Between 1993 and 2003, foreign mining companies invested about US $6.7 billion in mines in the country, and projects involving potential investment of more than US $10 billion are currently being considered.[1] As a result, production of gold, silver, copper, zinc, molybdenum, and other precious metals has expanded dramatically. With this growth, gold and copper are now Peru's biggest exports, and mining now accounts for half of Peru's foreign earnings.[2]

The Peruvian government and its international donors, however, could have done more to balance efforts to attract foreign investment with appropriate steps to ensure that environmental and social impacts were minimized or that traditional property interests were respected. Indeed, in some cases it took steps in the opposite direction. For example, the government offered large-scale miners "stabilization agreements" that precluded the government from strengthening environmental requirements for their facilities for 10 to 15 years.[3] Over the objection of the local landowners, it rolled back protections for collectively held *campesino* land titles by creating *servidumbres* (easements) that allow miners to gain access to subsurface mineral deposits.[4] Moreover, the government did not embed strong community participation requirements into its environmental assessment procedures,[5] and did not sufficiently scale up its regulatory and enforcement capacity to deal with the multiplying demands created by the investment boom.

The mining companies were also insufficiently attentive to environmental and social concerns. In the rush to invest and expand, they did not always take care to ensure that community preferences were respected, adverse impacts avoided, or benefits broadly shared. In response, affected communities have become increasingly sensitive to the negative social and environmental impacts of mining operations, and increasingly assertive about demanding a broader and more equitable distribution of benefits through political action, mass mobilization, and civil disobedience.[6] In 1999, as a result of conflicts, such as those at Antamina and in Vicco, Ilo, and La Oroya,[7] communities affected by mining united under the banner of the National Coordinator of Mining-Affected Communities (CONACAMI) to coordinate their advocacy efforts and campaign at the national level. This union enabled the affected communities to expand capacity, substantially increase the scope and effectiveness of their individual political advocacy efforts, and build political momentum against the mining industry.[8]

The conflicts between the Yanacocha mine and the communities of Cajamarca and Choropampa in 2000 and 2001 exacerbated the growing anti-mining sentiment, and helped shape the political dynamics in a number of equally contentious conflicts in other Peruvian communities.[9] For example, in June 2002, an ongoing conflict between the residents of Tambogrande and Manhattan Minerals of Canada over a proposed US $405 million copper and gold mine came to a head when the community held a public referendum and rejected the project by a wide margin. As a result of the referendum and a sustained local campaign supported by national civil society organizations and the Catholic Church, the company could not find a partner for the venture and could not meet the terms of the option to develop the site that it had received from the Peruvian state mining company. Citing losses of US $60 million on the venture, Manhattan Minerals was forced to abandon its plans for the mine, and subsequently renounced any intention to invest in Peru ever again.[10]

By late 2002, the World Bank and Inter-American Development Bank (IDB) were warning that the conflicts between communities and large mining concerns were beginning to affect the broader political culture in which companies operate. They noted that:

continued next page

BOX 5 | CONTINUED

> ... the environmental record of the mining industry has begun to impede private sector development. Even when controls existed on paper, they are seldom implemented in practice. Social and political conflicts that were mainly triggered by accidents impacting the environment or the social fabric of the local community, such as spills or resettlement issues, have threatened the ability of companies to pursue mining permits or to continue to run their already existing operations.[11]

If anything, however, the World Bank and the IDB underestimated what was to come. By mid-2004, the political culture in Peru had turned strongly against the mining industry, and communities became markedly less willing to endure the negative impacts associated with hosting a large mining facility. A number of high-profile conflicts ensued in rapid succession. In September 2004, the disputes over Cerro Quilish culminated in mass protests that resulted in Newmont's withdrawing from Quilish and renouncing any intention to develop it without community support. Two months later, a group of local residents entered an exploration camp at La Zanja, a proposed open-pit mine also owned by Newmont and Buenaventura, and destroyed rock samples and equipment.[12] Then, in December, mining protestors conducted a two-day strike that shut down three provinces in the area.[13] In May 2005, protestors occupied BHP Billiton's Tintaya copper mine in southern Peru, the third largest copper mine in the country. The protestors, who demanded that the company invest US $20 million in local community development projects, were dispersed only after authorities interceded with tear gas. The dispute forced the mine to close for a month.[14] And in July 2005, Río Blanco, a proposed $800 million copper mine near the Ecuadorian border, became the latest center of conflict. While the project is still in the exploratory stage, its sponsor, Monterrico Metals, claims that the mine will become Peru's second largest copper mine when it opens in 2008, and will increase Peru's copper production by over 20 percent. Local residents, however, are concerned that the mine will contaminate an aquifer that feeds the rivers that provide critical water sources for the villagers and their farms and supports important natural habitats. At least one protestor was killed and 40 were injured after 3,000 campesinos entered the company's exploration camp on July 28.[15] In addition, there have been a number of less visible conflicts: the Peruvian government reported at least 12 serious disputes between mining companies and their host communities in July 2005 alone.[16]

Taken together, these conflicts have the potential to significantly affect the Peruvian mining industry. The Peruvian National Society of Mining, Petroleum and Energy (SNMPE) estimates that these protests have placed at least US $1.1 billion in investments at risk.[17] SNMPE also points out that these protests may affect privatization and investments in the Quellaveco, Michiquillay, La Granja, and Toromocho copper projects, and the development of a major new copper mine at Granjas. The SNMPE conservatively estimates the value of those projects at over US $3 billion.[18]

Notes

1. *The Economist*, Feb 3, 2005.
2. Bury 2005, p.224; Environmental News Service, Aug 9, 2005; Reuters, Aug 8, 2005a.
3. Mainhardt-Gibbs 2003, p. 20.
4. De Echave and Torres 2005, p. 44.
5. Christian Aid 2005, p. 41.
6. Compliance Advisor/Ombudsman of the International Finance Corporation 2005, p. 5.
7. The conflicts in Cerro de Pasco and La Oroyo actually involved smelters rather than mines, but were widely perceived as part of the mining-metalurgy sector.
8. De Echave et al. 2005, p. 12.
9. *The Economist*, Feb 3, 2005.
10. Business News America, Feb 7, 2005a.
11. World Bank and Inter-American Development Bank 2002, p. 143.
12. *The Economist*, Feb 3, 2005.
13. *Id.*
14. Reuters, Aug 4, 2005b.
15. Environmental News Service,Aug 9, 2005; Reuters, Feb 7, 2005a.
16. Weitzman 2005.
17. Reuters, Aug 4, 2005b.
18. *Id.*