

# SMI **CSR**M

Centre for Social  
Responsibility in Mining

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## A third party review of the Barrick/Porgera Joint Venture off-lease resettlement pilot

### Operating context and opinion on suitability

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October 2015



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# SMI CSR

Centre for Social  
Responsibility in Mining

The Centre for Social Responsibility in Mining (CSR) is a leading research centre, committed to improving the social performance of the resources industry globally.

We are part of the Sustainable Minerals Institute (SMI) at the University of Queensland, one of Australia's premier universities. SMI has a long track record of working to understand and apply the principles of sustainable development within the global resources industry.

At CSR, our focus is on the social, economic and political challenges that occur when change is brought about by resource extraction and development. We work with companies, communities and governments in mining regions all over the world to improve social performance and deliver better outcomes for companies and communities. Since 2001, we have contributed to industry change through our research, teaching and consulting.

## Key terms

Displacement	Physical displacement occurs when there is loss of residence or assets resulting from project-related land acquisition and/or land use that require affected persons to move to another location. Economic displacement occurs where there is a loss of assets or access to assets that leads to loss of income sources or other means of a livelihood as a result of project-related land acquisition or land use.
Relocation	Relocation is a process through which physically displaced households are assisted to move from their place of origin to an alternative place of residence. Households may receive compensation for loss of assets or may be provided with replacement land or housing structures at the destination site.
Resettlement	Resettlement is the comprehensive process of planning, displacement, relocation, livelihood restoration and support for social integration. Involuntary resettlement occurs without the informed consent of the displaced persons or if they give their consent without having the power to refuse resettlement
Resettlement Action Plan	A Resettlement Action Plan (RAP) is a document in which a project sponsor or other responsible entity specifies the procedures that it will follow and the actions that it will take to mitigate the adverse impacts of resettlement, compensate for losses, and provide livelihood restoration support to people resettled by the project. <sup>1</sup>

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<sup>1</sup> Key terms adapted from the IFC's "Handbook for Preparing a Resettlement Action Plan, Environment and Social Development Department". See: <http://www.ifc.org/wps/wcm/connect/22ad720048855b25880cda6a6515bb18/ResettlementHandbook.PDF?MOD=AJPERES>

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## Executive summary

This report is the result of third party review of Porgera Joint Venture's (PJV) off-lease resettlement pilot framework for its Porgera mine in Papua New Guinea (PNG). The pilot project involves two settlement communities from within the mine lease area: Pakien and Panandaka Ridge. The resettlement framework has two features that differentiate the pilot project from Barrick PJV's relocation practice. First, it will involve resettling these two communities away from the mining lease. Since 1989, the operation has functioned in an environment where both the mine and the community actively use the mine lease area. Second, Barrick PJV is aiming to align its practice with the IFC Performance Standard 5 on Involuntary Land Acquisition and Resettlement. This will involve a shift from compensation packages as 'transactions' to an approach that focuses on risk minimisation and livelihood restoration for resettled people.

The project is referred to as a 'pilot' because the PJV is looking to test the practicalities of the framework with the two communities before it considers undertaking further resettlement activities. The term is also being used to differentiate the current project from a previous off-lease resettlement initiative that was proposed by the PJV in 2007-8. This previous initiative considered relocating the entire on-lease population. The settlements at Pakien and Panadanaka Ridge represent a small portion of the total on-lease population. Neither PJV nor the PNG government have a track record of resettlement. However, even when presented as a pilot, this project would represent the largest mining-induced resettlement ever attempted in PNG. Funding for the pilot has been approved by Barrick Gold's Resettlement Steering Committee. Engagement with the national government and landowners about a 'shared responsibility' model has commenced and the recruitment of a multi-disciplinary project team is underway.

The Centre for Social Responsibility in Mining (CSRSM) at The University of Queensland was engaged by Barrick PJV in July 2015 to conduct the external review. The scope was to (i) provide a concise history of relocation activity at the site, (ii) review the framework underpinning the pilot project, and (iii) offer an opinion on the suitability of the pilot itself. The review involved examining background documents and interviews with 31 stakeholders familiar with the history of relocation at Porgera. Barrick PJV and CSRSM agreed that the report would be written for a public audience, considering that many readers may have a limited knowledge of PNG or of the complexities that exist at Porgera.

In contemplating suitability, the authors considered the 'do-ability' of different project elements; that is, whether different components are feasible, both separately and alongside other project elements. We also considered the 'defensibility' of different elements; that is, the extent to which the project can justify its aims and intent, and what changes or actions might be required where the project logic does not appear to be coherent.

At the time of the CSR review, the pilot project was at an early stage of development and many key elements are yet to be defined. There were a number of critical risk areas that had not been accounted for, significant capacity and knowledge gaps that had not been resourced or filled, and crucial steps needed to form partnerships that had yet not been taken. The PJV has stated its intent to address these issues by committing resources and embarking on a comprehensive engagement and planning process. It is the authors' opinion that in order for the PJV framework to be considered suitable, and for the project to be viable, these issues need to be progressed beyond a statement of intent.

While many of the individual elements of the project appear to be do-able as discrete project components, we are not confident that the project is achievable as a whole. Throughout the planning and implementation of the pilot, the project will need to order and sequence a complex set of variables. Project elements will need to align to identify safe and secure destination land, where people are not exposed to unnecessary risk, and where the livelihoods of resettled people are restored, or improved. The degree of difficulty involved in achieving these objectives, in this operating context, without exacerbating pre-existing issues cannot be underestimated.

### **The operating context**

The Porgera mine is located in the Enga Province of PNG, one of the most socially complex, remote and undeveloped regions in the country. Porgera is a combined open pit and underground gold and silver mine owned by the PJV and operated by Barrick Niugini, previously a wholly-owned subsidiary of Canada's Barrick Gold Corporation, one of the world's largest gold producers. In September 2015, Chinese owned Zijin Mining Group acquired 50 percent of Barrick Niugini for US\$ 289 million, with Barrick Gold retaining 50 percent ownership. Under the new corporate structure, Barrick Gold and Zijin jointly control Barrick Niugini. Mineral Resources Enga – a company jointly owned by the landowners of Porgera and the Enga Provincial Government – has maintained its original five percent share in the PJV.

A Special Mining Lease (SML) was granted to the PJV in 1989. While the size of the SML has not changed since permitting, the PJV has almost doubled its total land area via an increasing number of Lease for Mining Purposes (LMPs). Operational impacts have resulted in the need for some residents to relocate while at the same time reducing the amount of habitable and productive land within the lease. The current level of congestion on the lease area is a result of the mine's expanding footprint and significant increase of the on-lease population through in-migration and natural population growth. The continuing presence of tribal conflict in the Porgera Valley makes the proposition of relocating people off the mining lease particularly high risk.

In the mine's early stages, the relocation of households within the mine lease area seemed like a workable solution. A short mine life was anticipated, and landowners preferred to

remain close to their original lands, both to avoid tribal conflicts and in order to access economic opportunities from the mine. At the time, there appeared to be enough land available within the lease area to accommodate the initial project footprint and the existing population. However, the cumulative impact of population growth, project expansion, operational impacts and on-lease relocation has intensified pressures on the lease. At the present time, residents on the lease and in surrounding areas face limited access to government services, degraded civil infrastructure such as roads, schools and hospitals, high unemployment, and ongoing clashes and competition between tribal groups. Widespread, unauthorised access to LMPs for alluvial mining and to the SML for hard-rock mining, also pose major security concerns.

### **Structure of the report**

To understand the pilot project – and the likelihood of success or failure – it is important to understand both past practice and the current context in which the pilot is being planned. The report begins by describing the physical environment of the mine, and introduces the company and the landowning community: the Ipili people of the Porgera Valley. The report then provides a brief overview of mining and resettlement in PNG before taking readers back in time to describe the PJV’s past relocation practices and previous attempts at off-lease resettlement. With this context in mind, the authors then outline the key components of the framework and the pilot. The report concludes with an opinion on the overall suitability of the project.

### **The off-lease resettlement pilot project**

The pilot resettlement framework developed by Barrick PJV is a response to a number of stated problems. These include a shortage of land for both the operation and the community, congestion and overcrowding on the lease area that exacerbates safety and law and order issues, ongoing demands from landowners for off-lease resettlement, increasing levels of social impact from the mine’s activities, and a mounting liability in terms of the costs and complexities associated with addressing and resolving these issues.

In addition to these issues, the lease for the SML is due for renewal in 2019. Interviewees internal and external to the company explained that the conditions on the lease would most likely have a bearing on SML renewal negotiations for the Porgera mine. At the same time, PNG’s Mineral Resources Authority has flagged its interest in a requirement for off-lease resettlement being incorporated into a revised Memorandum of Agreement between the state, landowners and the PJV. For these reasons, some company interviewees suggested that it is important for the PJV to proactively demonstrate progress in its resettlement efforts.

The off-lease resettlement pilot project contains a number of features that differentiate it from the company’s current relocation approach. The proposed new elements include:



- supporting households to identify and move to resettlement sites that are located off the mine lease area, rather than remaining resident within the lease boundaries
- shared responsibility between government, company and landowners
- replacement land with residential plots and areas for small-scale agriculture
- a livelihood restoration and improvement component
- provisions for housing, physical infrastructure and social services
- moving households as family groups rather than on an individual basis
- including household heads in the negotiation process, as well as clan representatives (known as 'agents')
- broad-based engagement that includes a diverse group of stakeholders
- developing a comprehensive social monitoring program
- improving information and knowledge management systems
- identifying and supporting vulnerable persons.

Land tenure options for resettled households are yet to be agreed. A land tenure study identified three options: direct dealing, state leases, and a hybrid model in which the government, company and customary landowners negotiate a tailored option to suit the circumstances and ensure the best possible tenure arrangement under the circumstances.

### **Critical issues to be progressed**

This report details a number of critical issues that would need to be addressed for the pilot to be deemed suitable, including:

- recognition of the scale of the challenge by all stakeholders involved
- definition of 'shared responsibility' at different stages of the project
- joint decision-making process where no single party has ultimate power of veto over key elements of the pilot and future resettlements
- testing of demand for off-lease resettlement at the household level, with appropriate access to information about all dimensions of the project
- greater investment in preparatory and planning work by the PJV, including, due diligence for replacement land; detailed livelihood restoration strategy; conflict and security assessment; social and human rights risk assessment; gender and vulnerability assessment.
- eligibility criteria and entitlements packages that reflect the rights and socio-economic circumstances of both the landowner and non-landowner residents living on the lease.
- explanation of how the displacement of short-term non-landowners will be responsibly managed if they are not considered as eligible persons
- knowledge and information systems that support engagement, planning and implementation and monitoring processes

- skills and resources commensurate to the scale of the challenge
- demonstration that settlements remaining on the lease (while the pilot is underway) would not be deprioritised as a function of the pilot project coming on stream
- a world-class monitoring, evaluation and review process with regular and transparent reporting on progress, including against agreed 'success' indicators.

### **Future monitoring of the pilot project**

The PJV has been subject to high levels of scrutiny from the international community, including on issues such as human rights violations, environmental pollution, and more recently, gender based violence. In recognition of the need to improve levels of transparency around its social performance, there are plans to appoint an independent observer to monitor the pilot project. This report is considered to be a preliminary step toward establishing third party oversight of the development and implementation of the resettlement pilot. The proposed role of the third party monitor is to document the pre-displacement engagement and planning activities of the pilot project, the implementation of the physical displacement phase, and the performance of the various responsible parties in the provision of livelihood support and social services to the displaced population.

# 1 Introduction

## The brief

Following a strategic review of relocation activities at the Porgera mine from 1988 to 2013, Barrick PJV developed a framework for progressive off-lease resettlement. One major challenge at the Porgera mine is that a ‘dual occupancy’ model exists where both the mine and the community actively use the mining lease area.<sup>2</sup> Based on the off-lease resettlement framework, funding for an initial pilot of two settlement areas was approved by Barrick Gold’s Resettlement Steering Committee in 2014.<sup>3</sup> During Barrick PJV’s consultations with the Papua New Guinea (PNG) Government, the Porgera Landowners Association (PLOA) and the Local Resettlement Committee (LRC), it was determined that an ‘independent observer’ should be appointed to monitor the pilot.<sup>4</sup>

In March 2015, Barrick PJV approached the Centre for Social Responsibility (CSR) at The University of Queensland in Australia about the possibility of partnering with a PNG-based entity to serve as an independent observer for the pilot. As a preliminary step, Barrick PJV agreed to fund a rapid review of relocation at Porgera and the off-lease resettlement pilot. The agreed scope of work required CSR to: (a) provide a brief history of relocation at Porgera and (b) offer an opinion on the ‘suitability’ of the progressive off-lease resettlement pilot framework. The scope of work also recognised the need to situate the Porgera mine within the context of its broader operating environment. In the interests of transparency, Barrick PJV agreed to make CSR’s review available in the public domain.

In July 2015, two senior CSR researchers were appointed to undertake the rapid review. This involved an examination of background documentation, and consultation with a limited number of stakeholders who were familiar with the history of relocation at Porgera and what off-lease resettlement might entail at the operation. The review did not include a visit to the site or consultation with surrounding communities. Barrick PJV and CSR agreed that the report would be written in a manner that would be accessible to readers interested in the pilot, but who may have limited knowledge of PNG or of the complexities that exist at Porgera.

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<sup>2</sup> In this report, the term ‘mining lease area’ encompasses the Special Mining Lease (SML) and the associated Leases for Mining Purpose (LMP).

<sup>3</sup> The Resettlement Steering Committee includes representatives from Barrick’s corporate office and Barrick PJV. The pilot was subject to a second review by an internal investment committee in 2015 and again endorsed as an important project to progress.

<sup>4</sup> At the time of the CSR review, the LRC was in the process of being formalised.

## The review process

In undertaking the review, the CSRSM researchers familiarised themselves with news items, academic work, and publicly available reports by government and non-government organisations about the Porgera mine. A resettlement position paper prepared by the Porgera Landowners Association (PLOA) also formed part of the review.<sup>5</sup> In terms of research, the presence of the Porgera mine has generated a significant body of work. Some of this research has been undertaken on an independent basis and some of it was commissioned by the company. Most of the commissioned research is bound by conditions of confidentiality and non-disclosure, and has therefore not been available in the public domain. For the purposes of this review, Barrick PJV provided CSRSM with a significant volume of this research and a broad range of company documents, including policy briefs, management procedures, agreements, photographic records and maps.<sup>6</sup>

Interviews were conducted with 31 people. The primary criteria for inclusion in the interview process was that individuals needed to have significant knowledge and direct experience with relocation or resettlement at Porgera.<sup>7</sup> An initial list of interviewees was discussed with the company, with CSRSM adding to this list as interviews progressed. Several people who were invited to participate were unavailable during the review period. Table 1 provides an overview of the sample.

*Table 1: Summary of interview sample*

Stakeholder group	Male	Female	Total
Barrick Toronto or Perth office	4	-	4
PJV senior management	4	-	4
PJV functional/specialist staff	5	1	6
External consultants	9	-	9
Independent parties/researchers	1	2	3
Government representatives	3	-	3
Land owner representatives <sup>8</sup>	2	-	2
	28	3	31

Prior to commencing interviews, ethical clearance was granted by The University of Queensland. A tailored interview protocol was developed by CSRSM to reflect the scope of the review. The interview focused on the knowledge of individuals based on their role or experience with relocation and resettlement at Porgera. Interviews were conducted by the

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<sup>5</sup> Ekepa, M.T. (2015) Resettlement Terms of Reference Proposed by the Porgera Landowners Association. Unpublished Position Paper. The document was received by the CSRSM team in the final stages of the review process. The paper had not been shared with the PJV at the time of the review.

<sup>6</sup> Particular works are referenced where a direct quotation is used or where the perspective offered is unique.

<sup>7</sup> Three paired interviews were conducted, reflecting the preference of research participants.

<sup>8</sup> Landowner representatives were selected by the Porgera Landowners Association (PLOA).

two CSRSM researchers either by Skype/telephone or in person (Brisbane or Port Moresby).<sup>9</sup> Many interviews were audio recorded, with consent first sought from participants. Interview data (recordings and transcripts) remain confidential and accessible only to the CSRSM review team. None of the quotations used in the report have been attributed to individuals. While interviewees were provided with an opportunity to comment on a draft of this report, the authors retained editorial control.

## Structure of the report

Following a brief introduction, the report provides a high-level description of the mine's location, history of ownership and the basic configuration of the mining complex at Porgera (Section 2). This section also describes the mine's expansion over nearly three decades. Section 3 outlines several key features within the PNG context as foreground discussion. This context is written to assist the reader in understanding some of the factors that have contributed to the present situation at Porgera. The present situation on the lease and nearby areas is detailed in Section 4. Sections 5 and 6 provide an overview of the PJV's approach to relocation since mining activities began in 1988. Section 7 outlines the main features of the off-lease resettlement framework. An opinion on the 'suitability' of the proposed off-lease resettlement pilot is presented in Section 8.

## 2 Brief description of the Porgera mine

The Porgera mine is a combined open pit and underground gold and silver mining operation. The operation is located in the Porgera Valley in the western part of Porgera District in the Enga Province of PNG. The site of the current open pit was formerly known as Mount Waruwari. Exploration for the large-scale mine commenced in the 1970s. Following feasibility and permitting studies through the 1980s, approval for the large-scale mine was granted by the PNG government in 1989. Construction began that same year and gold was first poured in 1990. Porgera is considered a 'world class' operation and is the second largest mining operation in PNG. On average, since the commencement of operations, the mine's contribution to the country's total exports has exceeded 12 per percent.<sup>10</sup>

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<sup>9</sup> Interviews were conducted in English with clarification provided in Tok Pisin in a small number of instances.

<sup>10</sup> See: <http://www.peakpng.org/about-porgera/pogera-and-sustainability/>



Figure 1: Location of the Porgera mine, PNG.

The Porgera Valley stretches 25 kilometres across (east-west) and 35 kilometres in length (north-south) and sits at an altitude of between 2,200 and 2,700 meters with surrounding ridges reaching up to 3,850 metres. The topography within the valley is dominated by limestone bluffs and a series of high ridges. Due to the difficult topographic and climatic conditions, only about half of the valley's land area holds potential for agriculture. Only about 20 percent of the overall land in the valley is inhabited.<sup>11</sup> The mine itself is located 130 kilometres west of Mount Hagen, 600 kilometres north west of the national capital, Port Moresby, and 680 kilometres from the port city of Lae via the Highlands Highway which serves as the mine's main supply route.

The mine is owned by the Porgera Joint Venture (PJV) and operated by Barrick Niugini Limited, which was until recently (see below), a wholly-owned subsidiary of Toronto-based Barrick Gold Corporation, one of the world's largest gold mining companies. Ownership of the PJV has changed over the past three decades through corporate acquisitions and divestments. When Barrick Gold acquired Placer Dome in 2006, Barrick Niugini became the majority shareholder of the PJV. In 2007, Barrick acquired a 20 percent share which, at that stage, was held by Emperor Gold, taking Barrick Niugini's total shareholding of the PJV to 95 percent. Mineral Resources Enga – a company jointly owned by the landowners of Porgera and the Enga Provincial Government – has maintained a five percent share from the commencement of the project.

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<sup>11</sup> Glenn Banks provides a detailed description of the physical setting and associated implications from a social networking perspective in his PhD thesis. See: Banks, G. (1997) Mountains of Desire: Mining Company and Indigenous Community at the Porgera Gold Mine, Papua New Guinea. PhD Thesis, Australian National University.

In June 2015 under a new Chairman, Barrick Gold announced plans to revitalise the company by streamlining its asset portfolio, cutting debt and reducing costs.<sup>12</sup> Part of this plan involved Barrick selling its entire share in the PJV. Barrick subsequently entered into a strategic partnership with Chinese owned Zijin Mining Group. In September 2015, Zijin acquired 50 percent of Barrick Niugini for US\$ 289 million with Barrick Gold retaining 50 percent ownership.<sup>13</sup> Under the new corporate structure, it is expected that Barrick Gold and Zijin will jointly control Barrick Niugini through a six member board.<sup>14</sup> At the time of the CSR review, no formal plans for expansion had been announced. According to Barrick PJV, closure of the open pit is scheduled for 2025 and the underground mine and processing plant for 2027.<sup>15</sup>

The Barrick PJV industrial complex includes the open pit and underground mine, ore stockpiles, processing facilities, a lime quarry, workforce accommodation, a dam, pumping station, various access roads and four waste rock dumps. Two of the dumps are ‘competent’, or stable, and two are ‘erodible’. The erodible dumps were formed by placing waste rock into valleys adjacent to the mine and the Porgera River. These dumps are erodible in the sense that they are actively eroding and subject to gradual creep down the valleys. Waste rock is carried via the Porgera River through to the Lagaip and Strickland Rivers and eventually into the Fly River system. The mine’s electricity is supplied via a transmission line from a gas fired power station at Hides in the Southern Highlands Province. As part of the mine’s development, land at Paiam Township and the Kairik Airport was acquired by the national government through a state lease.

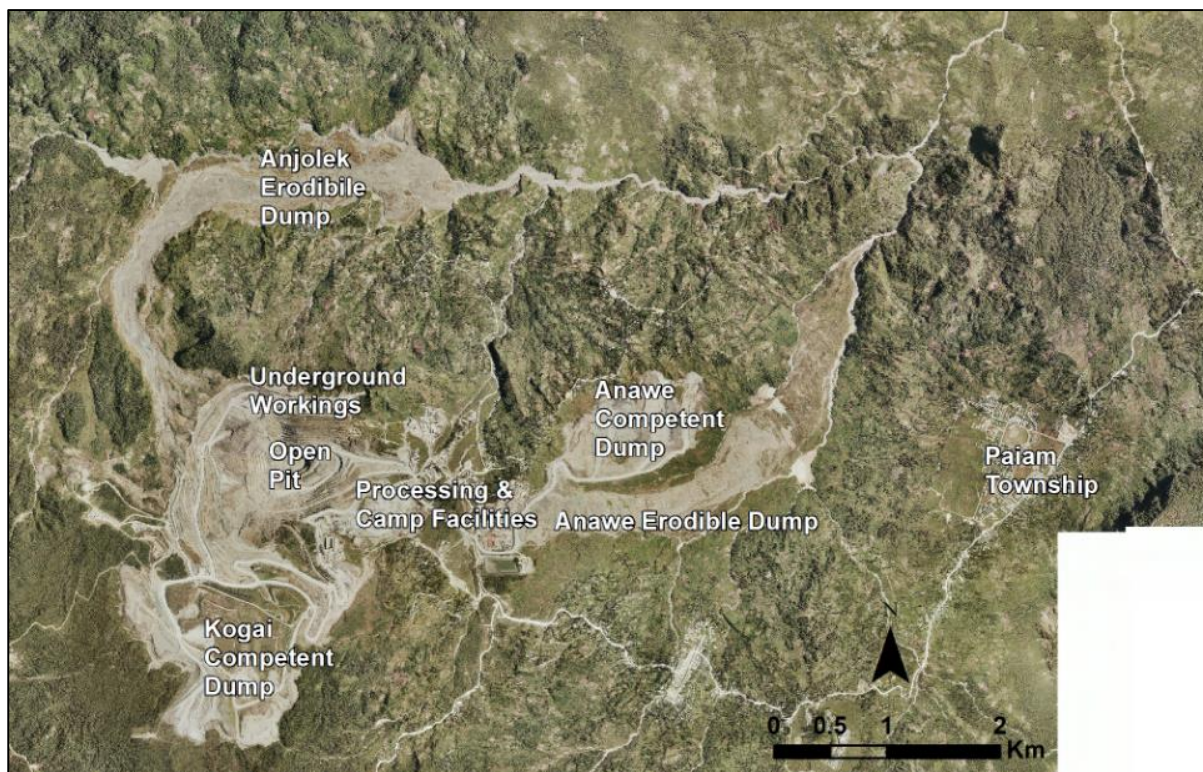
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<sup>12</sup> See: <http://www.bloomberg.com/news/articles/2015-02-19/barrick-gold-plans-to-reduce-debt-by-3-billion-sell-two-mines>

<sup>13</sup> In announcing the deal, both companies recognised the ‘significant potential’ that exists at Porgera. See: <http://www.barrick.com/investors/news/news-details/2015/Barrick-Announces-Strategic-Partnership-with-Zijin-Mining-Group/default.aspx>

<sup>14</sup> One party can nominate the Executive Managing Director, who will take responsibility for mine operations. The other party can nominate the Board Chairperson and the Deputy Managing Director. At the time of the CSR review, Barrick had nominated the incumbent Executive General Manager as the Executive Managing Director. Zijin was yet to announce the Chair and the Deputy Managing Director.

<sup>15</sup> The PJV recently commissioned a social closure study (Finlayson, 2015) that notes resettlement as a potential risk mitigation strategy for closure. The study does not elaborate the forward commitments associated with off-lease resettlement. The study notes that neither the Mining Act nor the Mining Development Contract for Porgera (1989) reference mine closure planning or reporting. PNG’s proposed new Mining Policy includes a prescriptive set of requirements for mine closure.



**Figure 2: The mining complex at Porgera**

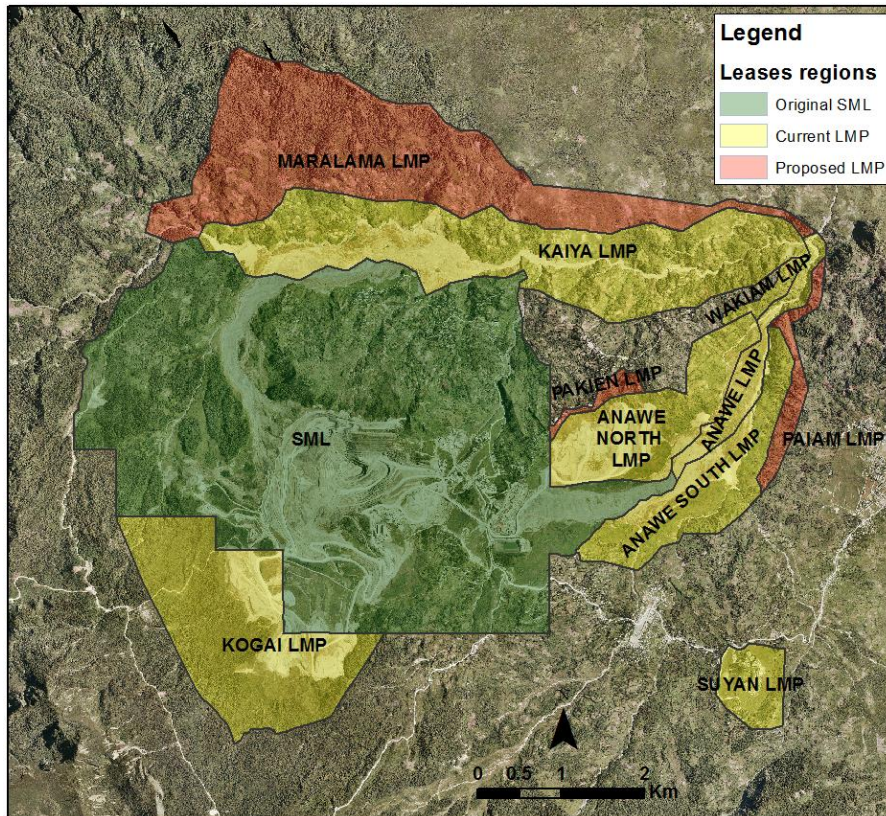
\* white indicates no data

The open pit and underground mines operate on a Special Mining Lease (SML). The SML was negotiated in 1989 between the PJV, the seven landowning clans, the Enga Province and the PNG Government.<sup>16</sup> Formalisation of the SML conferred exclusive rights to the PJV to conduct mining on the leased area. The original permit provided the mine with 2,107 hectares of land and allowed for the daily production of 8,500 tons of ore and 64,000 tons of waste rock. The PJV's permits were revised in the mid-1990s, increasing the allowance to 17,700 of ore and 210,000 tons of waste rock per day. While the size of the SML has remained constant, the total area of land leased by the PJV has almost doubled. This increase is primarily due to the use of erodible dumps, which were not part of the original mine plan. These dumps and other mine-affected areas are covered by 11 Leases for Mining Purposes (LMP).<sup>17</sup> PJV data sources indicate a total combined lease area (SML and LMPs) of 4,529 hectares. Figure 3 below indicates the location of the LMPs.

<sup>16</sup> The final agreement included the seven landowning clans (the Tieni, Waiwa, Tuanda, Pulumanini, Angalaini, Mamai and Anga). These clans negotiated an equity share in the mine, royalties and compensation to landowners for loss of assets.

<sup>17</sup> At the time of the CSR review, three of these LMPs were pending formal approval.





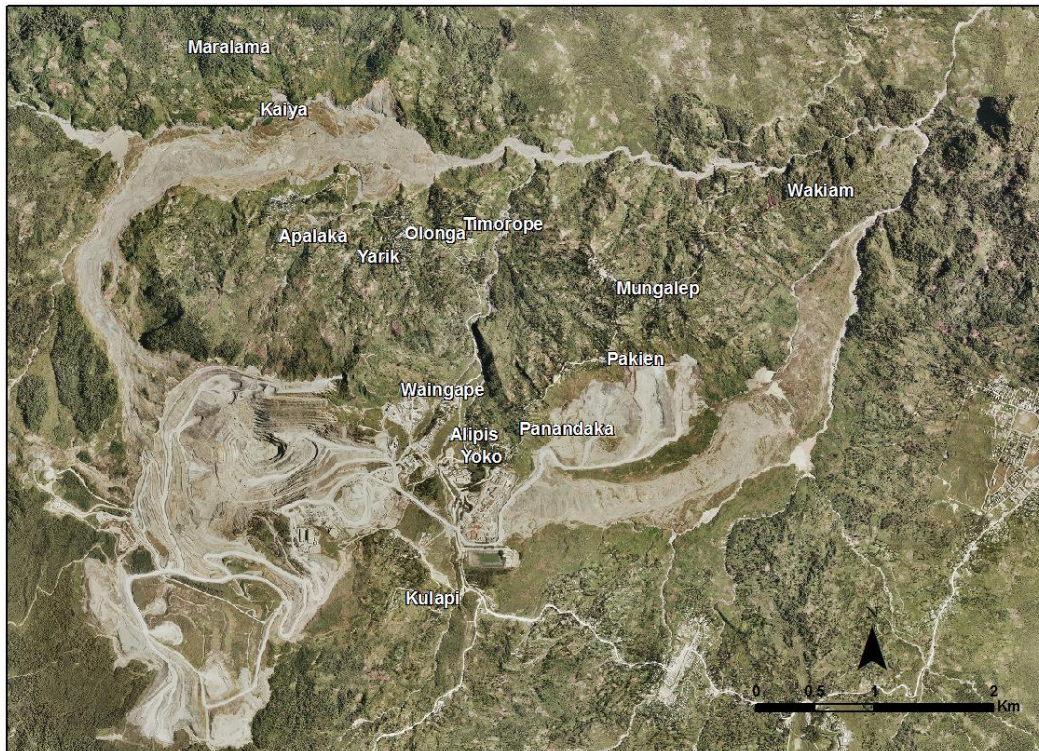
**Figure 3: Mining leases area at Porgera: original SML and LMPs (current and proposed)**

A large number of people reside in the Porgera Valley and many live in close proximity to the mine. To the north of the pit, the main settlements on the lease area include Apalaka, Yarik, Olonga and Timorope. These settlements run east along the northern boundary of the SML, south of the Anjolek erodible dump. Aside from a few original households, these settlements were established at mine start up in 1989 through the relocation of original settlements at Mt Waruwari and the current plant site. The settlement of Kaiya is situated north of the Anjolek erodible dump, on an LMP. Kulapi is the largest settlement on the lease area and is located south east of the open pit, in close proximity to the active mining area.<sup>18</sup> Kulapi is a relocation settlement of people who previously resided at Panandaka and Anawe.

To the east of the pit and north of the processing plant the main settlements are Alipis, Yoko and Panandaka. These settlements were also formed in 1989 and later received additional relocation households following the development/expansion of the Anawe North erodible dump. To the north east of the lease area is Maralama, which has an LMP pending. Mungalep and Pakien are encircled by the mine and the two erodible dumps, but are not located on either the SML or an LMP. Pakien and Paiam have LMP permits pending. Pakien is an original settlement and received relocation households from the Anawe North competent dump and elsewhere.

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<sup>18</sup> Kulapi is one large settlement comprising four distinct sub-settlements.



**Figure 4: Main settlement areas**

The Ipili are the customary owners of the land inhabited by the Porgera mine.<sup>19</sup> The Ipili are considered to be distinct from, but closely related to their neighbours the Engans, and the Hulis from the Southern Highlands Province.<sup>20</sup> Anthropologists have noted that, historically, the Ipili lived in scattered hamlets rather than in the more permanent settlements that are seen in the present day.<sup>21</sup> The combination of the physical setting and the sparse population created a strong need for trade and marriage links to be established with neighbouring groups. It is understood that these links served as a safety net in times of famine and in times of tribal warfare and conflict. The population of the valley has increased significantly since 1988. National census data from 1980, puts the (pre-mine) population of the Porgera Valley at approximately 5,000 people. With the mine in production, 1990 census data indicates that the population swelled to 10,000. By the PJV's own account, approximately 50,000 persons now live in the Porgera Valley.<sup>22</sup>

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<sup>19</sup> Golub, A. (2007) From Agency to Agents: Forging Landowner Identities in Porgera. In Wiener, J. and Glaskin, K. (eds) Customary Land Tenure and Registration in Australia and Papua New Guinea. ANU E Press. Canberra. pp. 73-96.

<sup>20</sup> Biersack, A. (1995) Introduction: The Huli, Duna, and Ipili Peoples Yesterday and Today. In Biersack, A. and Arbor, A. (eds) Papuan Borderlands: Huli, Duna, and Ipili Perspectives on the Papua New Guinea Highlands. The University of Michigan Press. pp. 1-54.

<sup>21</sup> Meggitt, M. J. (1957). The Ipili of the Porgera Valley, Western Highlands District Territory of New Guinea. Oceania. 28: 31-55.

<sup>22</sup> The Restoring Justice Initiative (RJI) suggests that the population in the Porgera Valley may be as high as 73,000 people. Robinson, R. (2014) Restoring Justice Initiative: Contributing to a Just, Safe and Secure Society in the Porgera District. Progress Report 2008-2014. Unpublished consultancy report for RJI.

In any description of the Porgera mine, it is important to note that alluvial gold mining, which involves low technology panning and sluicing to recover gold from creeks and river beds, formed a part of the livelihood complex in the valley for a half a century before the advent of large-scale mining. Alluvial gold was discovered in the late 1930s during colonial patrols. Alluvial mining activities expanded rapidly from the 1940s through until the 1960s. This period of rapid expansion brought both increased wealth to the valley and localised conflict, which was triggered by groups working in areas where they had no customary rights. This occurred in situations where Porgerans mined alluvial deposits themselves and where Porgerans and outsiders were employed as casual labourers by commercial operators. Historical records suggest that localised conflict did not escalate during this period, in part due to the presence of the patrol post.<sup>23</sup> By the 1980s, large scale exploration companies had become active in the area and major hard rock discoveries were made. ‘Gold rushes’ occurred at Mount Waruwari, the site of the Porgera mine’s open pit, and later at Mount Kare, which is located just 20 kilometres south west of Porgera.<sup>24</sup>

Porgerans and others extract gold from the mine lease areas using two primary methods. Alluvial mining occurs on the PJV’s two erodible dumps, for example. This activity involves individuals entering the LMP area in order to dig and pan for gold. The unlicensed removal of gold from a mining lease area is illegal under PNG law.<sup>25</sup> Another form of illegal mining occurs in the active mining area, including the open pit and underground mines.<sup>26</sup> This form of mining involves people entering the SML to extract gold bearing ore. Incursions into the active mining area are considered to be the mine’s principal safety and security challenge. According to a study about illegal mining undertaken in 2008, gold bearing ore is carried from the SML for processing at a secondary location, generally within the community.<sup>27</sup> Processing methods for alluvial and hard rock mining involve the use of mercury, which is readily available in the valley. Gold is sold to local buyers based in the area.

The forming of a large-scale mining licence at Porgera has led to a significant land use conflict between the company and individuals who do not have legal rights to mine in the SML and LMP areas. Conflict also occurs between local clan groupings who compete for a share of both legal and illegal mining benefits. According to one anthropologist: “Decades of

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<sup>23</sup> Banks, G. (1997) Mountains of Desire: Mining Company and Indigenous Community at the Porgera Gold Mine, Papua New Guinea. PhD Thesis, Australian National University.

<sup>24</sup> The Mount Kare gold rush occurred just as the Porgera mine was being permitted.

<sup>25</sup> Civil society groups (e.g. PNG Mine Watch) prefers ‘unauthorised’ to ‘illegal’ miners and has made a point of editing and re-publishing articles in track changes to make the distinction more apparent to their readers

<sup>26</sup> Illegal mining also occurs on the stockpiles and competent dumps. See:

<http://www.barrick.com/files/porgera/Illegal-Mining-at-PJV.pdf>

<sup>27</sup> At the secondary location, the ore is pounded and washed before mercury is added to form a mercury/gold amalgam. The mercury is burned off, leaving gold behind. Callister, G. (2008) Illegal Miner Study: Report on Findings. Unpublished consultancy report for Barrick PJV.

mining in Porgera have made kinship and landownership contested topics, even in areas not directly affected by mining”.<sup>28</sup>

### **3 The mining and resettlement context in PNG**

Since gaining independence from Australia in 1975, large scale mining has been a major driver of the PNG economy that brings with it great national benefit, a multitude of social risks and a regulatory burden for the state. The opening paragraphs of the recent 2014 UNDP *National Human Development Report for Papua New Guinea* puts the driver in context:

Papua New Guinea’s 40 year history of Independence has been dominated by the extractives sector. Large-scale mine and oil production (worth at least K150 billion since Independence) has driven formal sector growth, underpinned budgets that have improved health and education outcomes, as well as provided significant improvements in incomes and livelihoods for some. At the same time however, this production has sparked civil strife, caused massive environmental damage, arguably distorted the economy, and brought about a range of negative impacts on communities. Valuable lessons are being learnt (and have potential international relevance), but still the risk remains that the existing model of economic growth in the country will not deliver sustained improvements in well-being for the majority of the population.<sup>29</sup>

The country hosts a significant number of large scale mining operations with several more either in the advanced planning or exploration phases of development (see Figure 5 below).<sup>30</sup> In 2014, mining revenues contributed approximately 15 percent to national gross domestic product (GDP). The recent decline in commodity prices for gold and copper in particular have placed considerable strain on both the national budget and on the viability of major mining developments. Nationally significant projects, such as Porgera, Lihir and Ok Tedi have in the past 24 months seen reductions in staff, capital write downs and, in the latter case, a suspension of operations.

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<sup>28</sup> Golub, A. (2014) *Leviathans at the Gold Mine: Creating Indigenous and Corporate Actors in Papua New Guinea*. Duke University Press. USA, pp. 9.

<sup>29</sup> See: [http://hdr.undp.org/sites/default/files/2014\\_png\\_national\\_human\\_development\\_report.pdf](http://hdr.undp.org/sites/default/files/2014_png_national_human_development_report.pdf)

<sup>30</sup> Since 2011, several developments have occurred. The Ramu Nickel Mine has moved into production, the Star Mountains project in the West Sepik Province has moved into advanced exploration and several coal desposits have been identified in Gulf Province. Preliminary discussions are also underway around the re-opening of the Panguna Mine in Bougainville.

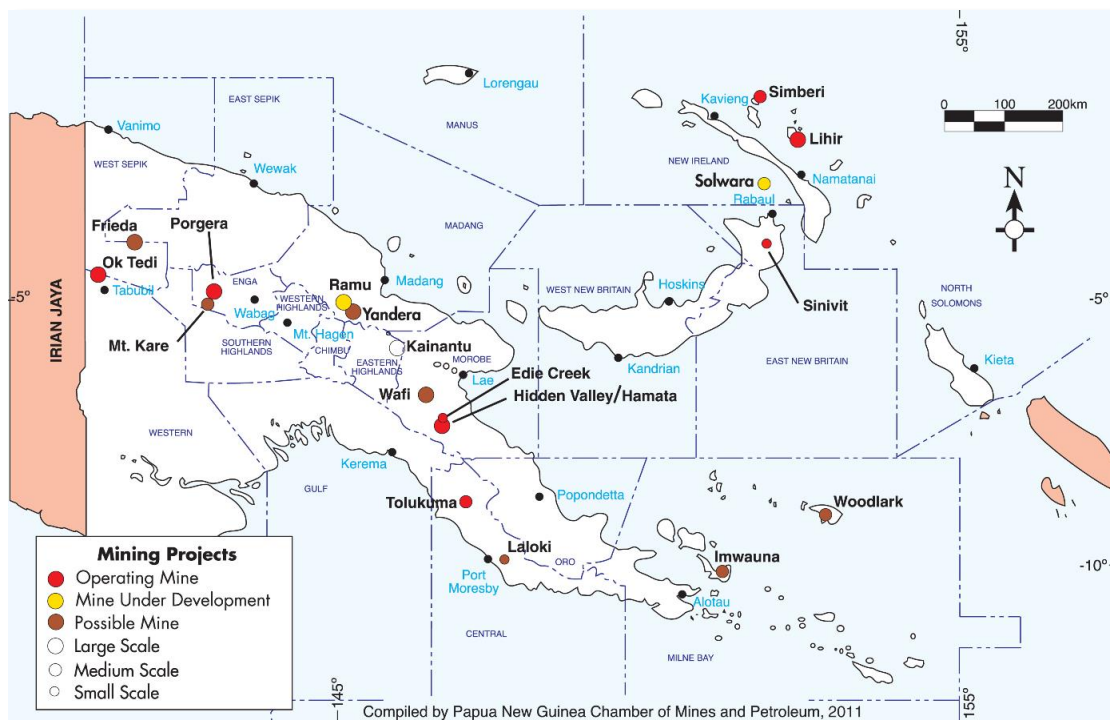


Figure 2: Mining projects map, 2011

The resource sector in PNG has also received greater interest from Chinese State Enterprises in recent times. In addition to Zijin's acquisition of 50 percent of Barrick Niugini, PNG has witnessed the development and operation of the Ramu Nickel project by China Metallurgical Group Corporation (MCC), as well as Guangdong Rising Asset Management's (GRAM) takeover of PanAust in May 2015 (and with it majority ownership of the Frieda River project).

Mining in PNG is regulated under a series of established laws and acts, including: Mining Act 1992, Mining (Safety) Act and Regulations 2007, Mineral Resource Authority Act 2005 and the Environment Act 2000. Several government departments and agencies are also involved in the coordination and regulation of the mining sector.<sup>31</sup> Across this mix of ministries and corpus of legislation, the mechanisms for guiding and regulating the social performance of the resource sector are poorly defined. Expectations around how developers will manage the risks associated with complex social issues like resettlement have not been articulated in the current body of legislation.

The social and regulatory environment in which resettlement would occur is also challenging in terms of the existing international frameworks. To begin with, 97 percent of the country's

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<sup>31</sup> Departments include: Conservation and Environment Protection Authority (as of 2015, formerly the Department of Environment and Conservation), Department of Mineral Policy and Natural Hazards Management, Minerals Resource Authority, Department of Foreign Affairs and Immigration, Department of Lands and Physical Planning, Investment Promotion Authority, Department of Provincial Affairs and Local Government and Department of Treasury.

total land area is held under customary tenure,<sup>32</sup> and the legal instruments for alienating or leasing land from customary owners are uncertain and often difficult to implement. There are resource and capacity constraints among the responsible government agencies, a lack of clear legislative guidelines and processes, and frequent land disputes at the community level that make land identification and acquisition in PNG challenging. Improving practices around engagement and understanding of requirements at the local level is also challenged by the cultural and linguistic diversity of the country. While PNG officially has three national languages: Hiri Motu, Tok Pisin and English, linguists have listed over 800 living languages in the country.<sup>33</sup> While resources and models can be developed at the national and international level, mining operators need to translate and navigate standards into a different set of cultural and linguistic structures with the development of each new project.

Moreover, there are few examples of successful ‘resettlement’ cases in PNG that developers can easily replicate.<sup>34</sup> There are no precedents for resettlement in the mining sector specifically. Mining-induced displacement in PNG has principally occurred as ‘relocation’ based on direct agreements with landowner representatives and without legislative guidance or government oversight in the design or implementation of relocation plans. None of the cases from 1990 onwards (e.g. Porgera, Lihir, Tolukuma) have included livelihood restoration elements, and the examples of mine-induced displacement since 2006 (e.g. Ramu Nickel, Porgera, Lihir, Simberi) would struggle to demonstrate alignment with the International Finance Corporation (IFC) Performance Standard 5 on Land Acquisition and Involuntary Resettlement, which stands as the industry’s global performance benchmark.

Prior to permitting, there is scope for authorities to list relocation activities in Environmental Permits, Memorandums of Agreement (MOA) or in Impact Benefit Agreements reached at Development Forums.<sup>35</sup> After permitting, the implementation and monitoring of relocation agreements becomes a matter for the developer and the displaced community to manage.

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<sup>32</sup> Recent studies indicate the percentage of alienated, or partially alienated land has grown in recent decades. The total land area held under customary ownership may therefore be substantially less than the widely cited 97 percent. See Filer, C. (2014) The Double Movement of Immovable Property Rights in Papua New Guinea. *The Journal of Pacific History*. 49 (1): 76-94.

<sup>33</sup> The Ethnologue: Languages of the World published by SIL Inc. lists 823 living languages for PNG. See: [http://www.ethnologue.com/show\\_country.asp?name = Papua + New + Guinea](http://www.ethnologue.com/show_country.asp?name = Papua + New + Guinea)

<sup>34</sup> In 2008, the World Bank concluded that the government-led resettlement of 12,000 people from the Tolai villages around Rabaul following volcanic eruptions in 1994 was largely successful. Support from aid and donor agencies exceeded US\$ 100 million over 15 years. See: Fingleton, J. (2013) Porgera Joint Venture: Land Tenure Options for Resettlement. Unpublished consultancy report for Barrick PJV, pp. 27-28.

<sup>35</sup> According to Filer, the first Development Forum in PNG was created during negotiations over the Porgera mine between 1988-89. Development Forums consist of a series of discussions between representatives of the national government, the relevant provincial government, local level government and the local landowning community. The intent is to secure joint endorsement of the mining development proposal and to formalise arrangements for the distribution of project-related benefits and responsibilities between the parties. The Development Forum model in PNG is recognised internationally as a mechanism for enabling local-level participation in the development of major mining projects. See Filer, C. (2008) Development Forum in Papua New Guinea: Upsides and Downsides. *Journal of Energy and Natural Resources Law*. 26: 120-150.

This arrangement is especially precarious in the mining industry given the pattern of incremental land requirements by projects and that a large proportion of displacement events occur post-permitting and during the operational phase of the mine.<sup>36</sup>

Similarly, issues such as in-migration have proven difficult to manage under the country's laws and regulations. Mining leases, for instance, provide developers with exclusive rights to undertake mining activities and to extract ore. At the same time, the constitution of PNG provides citizens with the right to freedom of movement throughout the country. In these circumstances, companies and government authorities must coordinate with customary landowners to regulate land use and to limit the impacts of population movement into mining areas.<sup>37</sup>

The resettlement context in Porgera will be subject to many of the same constraints that other developers have faced. Land acquisition, the formation of agreements with landowners, state capacity and the provision of basic social services will occur in the context described above. There are additional elements, however, that will contribute further complexity to resettlement at Porgera. The relatively open nature of the local kinship system is one factor that all stakeholders contend with. This is a kinship system in which individuals are able to invoke and secure entitlements through cognatic ties; that is, through both maternal and paternal lines. In the past, this inclusive system has provided the local Ipili people with a means through which to bolster their numbers in order to defend land and protect against famine. This has facilitated significant in-migration into the valley and the mining lease area in particular. Conflict in the Porgera Valley is not only a historical consideration, it is a factor that continues into the present day. The Chief Executive Officer of the Restoring Justice Initiative states that:

The Porgera District is located in one of PNG's most socially complex, remote and undeveloped regions. It is faced with issues such as poverty, crime, tribal conflict, gender-based violence, sorcery and illegal mining. All of these problems have been exacerbated within a context of limited law enforcement capability and access to government services.<sup>38</sup>

#### **4 Summary of the present situation on the mining lease area**

There is a direct connection between the conditions on the mining lease area, the history of the Porgera Valley and the current proposal for an off-lease resettlement pilot. The present

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<sup>36</sup> Banks, G. (2013) Little by Little, Inch by Inch: Project Expansion Assessments in the Papua New Guinea Mining Industry. *Resources Policy*. 38(4): 688-695.

<sup>37</sup> For an example from the Lihir gold mine in the New Ireland Province of PNG, see Bainton, N.A. (In Press) Migrants, Labourers and Landowners in the Papua New Guinea Resource Sector: A View from the Lihir Gold Mine. In Filer, C. and Le Meur, P.Y. (eds) *Large Scale Mining and Local-level Politics: Papua New Guinea and New Caledonia*. ANU Press. Canberra.

<sup>38</sup> Whayman, J. (2015) A public-private partnership tackling law and order in PNG. *Dev Policy Blog*. See: <http://devpolicy.org/a-public-private-partnership-tackling-law-and-order-in-png-20150605/>

situation in the mining lease area is a major driver behind the development of the off-lease resettlement pilot. This section describes the broad range of complex factors that have contributed to the present situation on the mining lease area.

The situation on the lease area was described by interviewees as “*volatile*”, “*hazardous*” and “*congested*”. In their resettlement position paper, the PLOA characterise the present situation as a “*crisis*”.<sup>39</sup> Numerous social studies conducted over the previous two decades describe a set of issues that are similar to those described by observers in the current day. The present situation essentially represents a continuation of complex problems from the past. However, with the passing of time, and the absence of effective interventions, these problems have become more intense and, in some cases, more intractable. Many of the issues that are present on the mining lease reflect issues that extend throughout the Porgera Valley, and elsewhere in the country. These issues have compounded in the context of large-scale mining.

The current level of congestion is a result of the mine’s expanding footprint combined with the exponential increase in the on-lease population through in-migration and natural population increase. Since the project’s inception in 1988, migrants have moved into the valley and onto the lease area to be closer to infrastructure, services, and the various economic opportunities associated with the mine, including alluvial and illegal mining. In the early years of the operation, outsiders were welcomed by the Ipili. This is still the case today as visitors continue to be important to Ipili cultural practices.<sup>40</sup> In this cultural context, the PJV has little ability to influence or control the movement of people into the valley or the lease area. Although exact numbers are not known, most parties agree that in the present day, the number of in-migrants or ‘visitors’ outnumber traditional land owners.<sup>41</sup> Many interviewees emphasised that the distinction between ‘in-migrants’ and ‘traditional landowners’ is not straightforward due to more than 25 years of in-migration, inter-marriage and second and third generation descendants.

Congestion directly affects living conditions on the lease area. The availability of productive agricultural land in the valley has always been scarce. Before the mine, residents could garden on the slopes of the lower reaches of the SML and areas now covered by erodible dumps. They could access water from local streams, and collect firewood for fuel and bush materials for the construction of houses and fences. These resources have since dwindled

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<sup>39</sup> This description has been offered in previous reports released by the PLOA and the Porgera Alliance. See: <http://www.porgeraalliance.net/2011/10/indigenous-landowners-release-report-demanding-urgent-resettlement/>.

<sup>40</sup> Background documentation notes that the local term *epo arene* is used to describe visitors as ‘come and stay people’. In addition to bolstering numbers to support bride prices and tribal fighting, *epo arene* also participate in cultural practices as part of an extended kinship network.

<sup>41</sup> The PLOA have indicated that a comprehensive community survey is needed to clarify the current on-lease population.



under the pressure of population increase and mine expansion. The availability of cash from mining royalties, rents, employment, business contracts, compensation, petty trade and illegal mining has meant that families are able to acquire goods from local stores, albeit at inflated prices. Through their increasing participation in the cash economy, the community has become dependent on mining as a source of income. Changes in the physical landscape and in the economic activities of the local population have moved many Porgerans away from more 'traditional' lifestyles that include subsistence gardening. Studies indicate that the younger generation do not see themselves returning to a more traditional lifestyle in the future.<sup>42</sup>

Within the lease area, households themselves have also become overcrowded through the incorporation of non-landowners into family units. Many migrants are people who have rights to move into the area by virtue of extended family ties and/or have secured rights by contributing to tribal fights, customary exchange, residence, money and/or hard work. In other words, kin relations provide an avenue for claiming entitlement, but are not a guarantee. As the Ipili recognise cognatic ties, it has been possible for large numbers of people to assert rights as a basis for moving onto the lease area. Reflecting the general lack of available demographic data for the lease area, household data across the various on-lease settlements is poor and considered to be mostly inaccurate. A recent estimate suggests that the average household size on the lease area could be as high as 13 people per unit.<sup>43</sup>

There are additional 'local' factors that have affected the composition of households. Many second and third generation couples have remained attached to an original principal landowner household due to an inability to secure land for separate housing. Observers have also noted an increase in the number of polygamist marriages amongst landowning men, which has in turn increased the size of household units. Polygamy is also linked to 'chain migration', whereby new wives bring (or follow) members of their own kin. In addition to overcrowding both on the lease area and within households, many of these households live in geo-technically hazardous locations. A large number of households are located on steep ridges or unstable land.<sup>44</sup> As mining activities have progressed, some areas have been 'undercut' by the erodible waste dumps or destabilised by natural erosion. One interviewee said, *"People can't live there anymore. It's over-populated and land is either being used or washed away. There is not enough land and the land slips."* In an area prone

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<sup>42</sup> Johnson, P. (2010) Scoping Project: Social Impact of the Mining Project on Women in the Porgera Area. See: [http://www.peakpng.org/resources/Women-in-Porgera-Report\\_Final.pdf](http://www.peakpng.org/resources/Women-in-Porgera-Report_Final.pdf)

<sup>43</sup> Ibid.

<sup>44</sup> Barrick PJV conducts geo-technical assessments of affected and relocation land before agreeing to relocate a household. When a permanent relocation house is provided sites are checked by PJV personnel ahead of compensation being released. In some cases, bush material houses have been constructed in unassessed areas.

to landslides and earthquakes, these arrangements have made for a precarious set of living conditions.

There is an absence of basic amenity for households residing on the lease and in nearby areas. This is not entirely unexpected given the challenge of servicing a large and unplanned population residing in a remote location in rugged terrain and the significant in-migration that has occurred. Both the government and the PJV have made attempts to improve social conditions of the valley. However, and despite these efforts, some basic services continue to be limited or non-existent. For example, the availability of potable water and sanitation is a major problem. Many settlements on the lease area do not have access to a reliable source of clean water.<sup>45</sup> There is no infrastructure or regular service for rubbish or waste disposal.<sup>46</sup> Several interviewees described the living conditions on the lease area, and the Porgera sub-district, as degraded and decaying. Much of the critical civil infrastructure such as roads, schools and hospitals were reported as being in a state of disrepair and requiring significant investment for care and maintenance.

As in many parts of the Porgera valley, safety and security is considered tenuous. Studies indicate that drinking, gambling, prostitution and violence, including tribal, domestic and gender-based violence are prevalent. The Porgera District Plan for 2013-2017 states that: “High in-migration, high unemployment, alcohol and drug abuse and possession of illegal weapons contribute to escalating law and order problems including tribal fights, violent crimes (rape, murder and assault) and illegal mining”.<sup>47</sup> At the time of the CSR review, the mine was operating under a State of Emergency, which had been in place since April 2014.<sup>48</sup> The State of Emergency was declared as a response to law and order issues in the valley and the impact of illegal mining on the operation of the mine.<sup>49</sup> While interviewees indicated that the security presence had relieved some pressure in the mining area, many interviewees noted that instability and violence, including armed tribal conflict in the valley, was said to be both endemic and escalating.<sup>50</sup>

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<sup>45</sup> Since 2013, the PJV has worked with several on-lease and nearby settlements to establish rain water catchment systems. Water tanks and communal taps are installed following agreement about ongoing care and maintenance. This initiative continues to expand.

<sup>46</sup> The PJV incinerates hospital waste in one of its two industrial incinerators when required.

<sup>47</sup> The Porgera District Plan, pp. 14.

<sup>48</sup> The current callout is one of the longest in Papua New Guinea since the Bougainville crisis in 1989.

<sup>49</sup> Approximately 550 PJV security personnel are involved in maintaining law and order in and around the mine. Half of these are unarmed local hire guards. One quarter of the total number of PJV security personnel are on field break at any given time and remaining staff work a day/night roster. The State of Emergency includes an additional 78 personnel, 42 of whom are members of the Police Mobile Squad and 36 are members of the PNG Army. These operate under the supervision of the Commissioner of Police.

<sup>50</sup> In addressing these issues, Barrick Niugini supports the Restoring Justice Initiative (RJI). The RJI is a multi stakeholder project that works in partnership with government, community, business, civil society, NGO's and donor entities to strengthen law and justice service delivery in the Porgera District of Papua New Guinea. The initiative started as a partnership between Barrick Niugini Ltd and the local community in response to serious concerns about the breakdown of law and order in and around the Porgera Mine. See:

Company and external interviewees describe the relationship between the company and the local community as “dynamic”, “fluid” and “unpredictable”. The company itself does not have longitudinal data, but it is the view of most interviewees that the current relationship largely represents an extension of patterns from the past. For instance, the State of Emergency might suggest an erosion of the relationship or the level of law and order. Against three previous special mobilisations and call outs, staff with a longer history at the operation indicated that this was “nothing new”. Likewise, where recent tribal killings, destruction of infrastructure and new no-go zones might suggest an escalation of violence, staff again indicated that this was “part and parcel of operating at Porgera”. Some staff did concede, however, that there were new dimensions to some of these issues, including an increase in violence associated with in-migration and illegal mining.

Prior to conducting field visits, it is standard operating practice to conduct field risk assessments to determine whether it is safe for company staff or consultants to attend meetings in the community or to inspect an issue at a settlement.<sup>51</sup> At the time of the CSRM review, several areas on the lease were considered ‘no go’ areas by company personnel due to outstanding grievances with the company and tribal fighting. Some consultants stated that it was not always possible to undertake fieldwork in a settlement either due to the risk of physical harm or because the sense of grievance in the community was too great and people were therefore not prepared to engage. The source of frustration and grievance was attributed to a range of factors, including: the company not meeting community expectations around the fulfilment of agreed or perceived commitments, the large number and varying types of social impacts present on the lease, and the dissatisfaction around the way that compensation and benefits are distributed between agents and landowners.

The complex range of social issues at the Porgera mine have been subject to intensifying levels of scrutiny by high profile international NGOs. Individuals who were involved in the mine’s early development describe a remote and isolated site, with a low profile on account of its relatively small size, presumed short mine life and limited road access. The past two decades have witnessed both improved physical access to the site and a heightened awareness globally of the mining industry’s impact on local people. International NGO campaigns about Barrick PJV and its parent company Barrick Gold have focused on human rights violations, environmental pollution and most recently, gender-based violence including multiple gang rapes of women by the mine’s own security personnel.<sup>52</sup> A number of NGOs, and indeed most people interviewed for the purposes of this review, consider the

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<http://barrickbeyondborders.com/people/2014/11/neighborhood-watch-how-the-restoring-justice-initiative-addresses-law-and-order-challenges-in-the-porgera-district/>

<sup>51</sup> Field level risk assessments aim to reduce the likelihood of harm to employees and contractors.

<sup>52</sup> Campaigns have been launched, for example, by Amnesty International, Mining Watch Canada and, most recently, Human Rights Watch. See: Human Rights Watch (2011) Gold’s Costly Dividend.

<http://www.hrw.org/sites/default/files/reports/png0211webwcover.pdf>

current situation on the lease area to be “unacceptable”. One senior company manager said, “Morally, this is wrong. There are too many people crammed in there [on the SML]. People are exposed to too many hazards. Too many children are exposed to the mine.” Another manager said, “I don’t think the current situation is acceptable to the company anymore. The risks are too great and the impacts on the community are too significant.”

## 5 Brief overview of the history of relocation

This section offers an overview of relocation activities at the Porgera mine from 1988 until the present day.

### Agreements, agents and destinations

During feasibility studies for the development of the Porgera mine in the late 1980s, it became apparent that the relocation of local residents would be required in order for the mine to proceed. Porgerans are said to have welcomed relocation as a “fundamental transformation of their lives for the better”.<sup>53</sup> In 1988, following completion of the socio-economic impact study, a Compensation Agreement between the PJV and landowners of the SML was negotiated and executed. During these negotiations, landowning families were represented by ‘agents’ of the 23 sub-clans.<sup>54</sup> Since this time, royalty payments have been made to agents who are responsible for distributing the funds among their clan members. As soon as the Compensation Agreement was settled, a relocation study was commissioned and negotiations for relocation advanced with the agents. A Relocation Agreement was finalised in 1988 with relocation of households occurring shortly thereafter. This agreement specified household-level compensation and details for the replacement dwelling.

Since 1988, the PJV has continued to negotiate relocation agreements through agents, who act as representatives for individual households. Agents are involved in categorising households and negotiating the exact nature of the relocation package for individual and groups of households. Agents receive a ‘sitting fee’ from the PJV for meetings attended as part of the negotiation process. Once the relocation agreement is finalised Barrick PJV engages directly with households to execute the agreement and process payments. The role of agents in relocation and the practice of distributing royalty monies through agents is highly contentious and often conflictual. One senior manager said that in terms of relocation, there was a high level of dissatisfaction with the current system of representation: “There have been concerns expressed about the role of agents and that they don’t always look after the interests of landowners.”

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<sup>53</sup> Golub, A. (2014) *Leviathans at the Gold Mine: Creating Indigenous and Corporate Actors in Papua New Guinea*. Duke University Press. USA, pp. 100-101.

<sup>54</sup> Today the PJV deals with a growing number of agents across its operations including the SML, LMPs, easements and riverine communities. Agents are also responsible for receiving and distributing a range of compensation and mining benefits.

The original Relocation Agreement of 1988 lists the original landowners residing on the SML and nominates nearby destination sites to which individual households agreed to move. Destination sites in nearby locations were identified by landowners based on customary connections. Landowners also expressed a strong preference for staying close to their original land in order to remain close to the mine and its steady flow of benefits. Destination sites were identified on the northern ridge of the SML at Apalaka, Yarik, Olonga and Timorope, and to the south at Kulapi. At the time of the 1988 agreement, the option of moving people off the lease area was considered. In addition to landowners wanting to stay close to their customary land, sourcing replacement land off the lease was deemed to be a difficult task owing to the lack of productive agricultural land, the challenge of securing land and the risk of families being exposed to conflict or tribal fighting in the Porgera Valley. For these reasons only a small number of relocatees elected to move off the SML at that time.

Additional relocations have occurred since the 1988 agreement. Some of these relocations have occurred in areas where households had previously been relocated, with some landowners being relocated multiple times. One interviewee described this as a “*shuffling*” of people around the lease area. By the mid-1990s, relocations were required for the LMPs, including for the Anjolek and Anawe erodible dumps. These agreements were established on an ‘open ended’ basis, reflecting the impending nature of impacts as waste inevitably moved downstream. In 2000, a rapid relocation occurred at Yarik to allow for construction of the pit drainage portal. A number of smaller ‘emergency’ relocations of households across the lease area have occurred as a result of the geo-technical impacts associated with the undercutting of land by the erodible dumps.

In terms of total numbers of relocated households, 189 landowning households and 76 ‘long-term’ non-landowners were relocated as part of 1988 agreement. A review of subsequent relocation agreements indicates that the number of relocated households that agreed to move had reached 506 by 1994, and 1,343 by 2013.<sup>55</sup> Not all of these relocations have been ‘closed out’ or completed.<sup>56</sup> Informal commitments have since been made by Barrick PJV to resettle the two pilot communities of Pakien and Panandaka ridge off the lease area. Given land shortages, relocation of these settlements within the lease area is not considered to be viable. Interviewees confirmed that there is literally “*nowhere to go*”.

### **Categories, eligibility and packages**

In addition to listing those people to be relocated and their destination sites, early agreements established an eligibility criteria for household relocation. This criteria has

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<sup>55</sup> Gerrits, R. (2013) Resettlement Framework for Progressive Off-SML Resettlement, PJV/Barrick. Unpublished consultancy report for Barrick PJV.

<sup>56</sup> Some delays were due to inter-household conflict and disagreement whereas others were delayed due to the open-ended nature of the relocation agreement itself.

formed the basis of all successive relocation agreements and is defined by category. The current criteria is outlined in Table 2, below.

*Table 2: Current eligibility criteria for household relocation packages*

<b>Category</b>	<b>Group<sup>57</sup></b>	<b>Definition</b>	<b>Entitlement</b>
1	Landowners and their descendants with primary residence on the SML/LMPs	Male and female direct descendants of a family who have continuously occupied land by way of building, cultivating and hunting on the land. This category does not include husbands or wives of landowners. Direct descendants of landowners who are over 18 years of age, married and maintain their own independent primary residence at the cut-off date.	Full relocation package.
2	As above	As above, where eligible households are identified as eligible, not yet impacted, and will be in the future.	Full relocation package, once impacted.
3	Long-term non-landowners with primary residence on the SML/LMPs	Non-landowners who have maintained continuous primary residency on the lease prior to the granting of the SML/LMP. Direct descendants of long-term non-landowners who are over 18 years of age, married and maintain their own independent primary residence at the cut-off date.	Full relocation package.
Uncategorised	Short-term non-landowners	Non-landowners who have not maintained continuous primary residency on the SML/LMP prior to the granting of the SML/LMP.	No relocation package. Minimal assistance.

The original package for eligible category 1 to 3 households included:

- a relocation house built on the site chosen by the eligible household.<sup>58</sup>
- an allowance (or logistical support) for relocating housing materials and personal effects.
- temporary assistance/hardship allowance.
- a gardening allowance to facilitate the rapid establishment of new plots.
- food rations of between six to nine months (and eventually funds to purchase food) during the transition period.

<sup>57</sup> Early agreements did not include descendants or second generation residents, as this was not a consideration at the time.

<sup>58</sup> The preferred design of relocation houses was for a modern housing design, rather than bush materials housing.

While the eligibility criteria has not changed, some adjustments have been made to the entitlements package. In 2001, for example, an option was added to provide eligible households with a choice between a relocation house and an investment option. Where households took up the investment option, a small portion of the entitlement was used to build a bush material house, and the balance was then invested in either real estate or a Trust Fund that provides an annual annuity for the relocated household. Aside from these income generating options, relocation packages at Porgera have never included a livelihood restoration component. In response to limited land availability on the SML, a land allowance was also introduced in 2001 to facilitate the movement of households off the lease area by providing relocation households with the financial means to compensate their hosts in the off lease settlement location.

Key elements of the relocation package have not worked as the PJV, the government and landowners had intended. Many households are said to have accepted the land allowance and used the money for purposes other than securing land off the lease area. One manager described the land allowance as *“a device for economic enrichment”*. Other interviewees described a longstanding pattern of asset liquidation under the original relocation package. Relocation houses built by the PJV are said to have been sold for cash before families moved in. For instance, families are believed to have returned to their original on-lease settlement to rebuild bush material houses or to have moved in with extended family elsewhere on the lease. Company interviewees noted that they were aware of cases where landowners had sold assets acquired through the real estate investment scheme for cash, at below market rate. This scheme was intended to provide a long-term, regular income for relocated households. There is no formal monitoring data to confirm these claims.

The large number of non-landowner residents on the lease area is a critical issue. Expectations around how non-landowners should be treated vary considerably within and between the landowner communities. The company has attempted to incorporate long-term non-landowners into the eligibility structure based on their length of stay in the area and their ties with landowner households. In many instances, due to the close ties between landowner and non-landowner households, it has not been possible for the company to forge a clear separation between these types of household units. Who should and should not be considered ‘eligible’ is a point of contestation among landowners on the lease area. Observers have suggested that as a rule, landowners are generally more accepting of non-landowners being incorporated into eligibility criteria when they have close kinship ties with the non-landowners in question; and are equally less accepting when the non-landowners claim eligibility based on kin ties with other landowner households or groups.

The company does not have a relocation category for so-called ‘short-term’ non-landowner residents. In some cases, short-term non-landowners were categorised as long-term non-landowners and received relocation entitlements. In other cases, short-term non-landowners were regarded as ineligible and received improvements compensation and/or

logistical support in relocation. In other instances, they were reported as receiving no support at all. Estimates about the size of the non-land owner population are the subject of some debate, however, it is broadly agreed that a large portion of the lease population is comprised of non-landowner households and residents. It has also been explained that company decisions around categorisation and eligibility can have serious consequences at the community level. Given that agents play a role in helping the company to identify landowners, the site's poor records management and the absence of a robust system for confirming and tracking genealogy, the company is not in a position where it can effectively arbitrate decisions around who is eligible for relocation and who is not.<sup>59</sup>

### **Planning and staffing for relocation**

In the past, planning for relocation can be characterised as reactive to the mine's operational requirements. There is no evidence to suggest that non-technical personnel from community relations or lands departments have been involved in mine planning to minimise or avoid displacement effects. According to interviewees, these departments become involved once land use requirements are determined by mine planners. Unplanned relocations have also occurred as an outcome of geo-technical events, such as the failure of the west wall of the pit in 2006. This event resulted in increased volumes of waste material being placed in the Anjolek erodible dump, which accelerated erosion and the need to relocate impacted households. Relocation practices at Porgera have essentially been driven by operational access and geo-technical impacts.

The opportunity for community relations or lands specialists to contribute to mine planning decisions is impeded due to the limited historical information at their disposal. The limitations of the company's record keeping was evident during the CSR review and has been a source of concern among managers, employees, consultants and researchers for at least two decades. The CSR team found that key studies, documents and data sets were dispersed among select individuals, and not held centrally. In some cases, key documents were not held by the company, but by consultants no longer engaged by the company. This includes genealogy work undertaken in 2006-7 relating to the on-lease population.

The PJV has recently sought to improve its management systems in a number of key areas. In 2012, the Lands Department introduced an electronic land information and payment system. This system is used as a central repository for maps, aerial photographs, geographic information system (GIS) coordinates, agreements, asset surveys and payment records. Previously, this information was held informally by individuals or dispersed across a number of filing and record systems. The new system was introduced to support the execution of compensation and relocation agreements. Staff report that the system is functioning as

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<sup>59</sup> Several external interviewees explained that some of these systems had been developed in the past, but had not been maintained.



intended, although there is a backlog of historical data to be captured. As it is currently configured, the system is not linked to the original census and genealogy data and is not used to monitor relocation outcomes. It is understood that the system has the capacity to perform these functions, but the primary constraint has been around staffing.

Issues associated with monitoring relocation outcomes have been highlighted in previous studies and were a prominent point of discussion during interviews. Company personnel indicated that their knowledge about relocation outcomes is largely observational and informal in the sense that the team works on the basis of a shared oral history, rather than a documented history or data driven monitoring and analysis. In effect, there is limited access to reliable data with which to interrogate key questions about relocation. During the interview process, several research participants suggested that in retrospect it would have been helpful to have access to information on a range of issues such as:

- type and number of households relocated and their final destination
- type and number of households relocated multiple times, and their final destination
- type and number of households that had relocated off lease
- type and number of households that had remained in the relocated location
- comparative data for relocated households vs. those not physically displaced
- comparative data for relocated households in different areas of the lease.

There is no longitudinal data or evidence to suggest that Barrick PJV or any other party has consistently monitored these or related matters so as to inform mine or relocation planning.<sup>60</sup> Several external interviewees remarked that efforts had been made over the years to improve monitoring systems and data sets but that relationships had not been maintained with individuals providing expertise and support. One interviewee said that as a consequence of not maintaining systems or relationships with its *“knowledge stakeholders”*, the PJV has *“a limited grasp of mine history”* because so much historical knowledge now sits external to the company.

The challenges at Porgera extend to the high pressure working environment that *“burns people out”*. Interviewees described three main challenges. The first relates to the ability of senior managers to focus on strategic priorities, such as off-lease resettlement. Senior managers said that they confront numerous competing issues and an urgent set of demands on a daily basis. Most indicated that law and order and security issues tend to occupy their time. Managers also cited a complex set of logistical challenges involved in convening senior

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<sup>60</sup> An extensive social monitoring program was undertaken between 1993 and 1997. Filer, C. (ed) *Dilemmas of Development: The Social and Economic Impact of the Porgera Gold Mine 1989 – 1994*. ANU E-Press. Australia.

leadership team meetings, which prevented this group from meeting at regular intervals. The second challenge is high staff turnover.<sup>61</sup>

The third issue relates to resourcing of the Relocation Unit given its workload on the lease area. The Relocation Unit is positioned under the Lands Department and, at the time of the CSRSM review, consisted of four members working on back-to-back rosters. The Relocation Superintendent position was vacant. In practical terms, this means that at any one time, two people service the company's relocation workload which, aside from effecting the physical relocation of households, includes servicing a large number of outstanding grievances and legacy issues. One member of the team said, *"Our capacity to manage on a day-to-day basis is an ongoing challenge."*

### Grievance handling and relocation

Porgera's grievance handling system has been unable to cope with the scale of issues present on the lease area. Historical deficiencies in the grievance handling system left a backlog of unresolved grievances against the company. The cumulative effect is the bundling of particular issues into a generalised and urgent demand for resettlement and a high-cost problem attracting international attention. In the absence of an effective system, site-based staff have only been able to offer tactical or temporary solutions, through compensation, emergency relocation and community development programs. These interventions engage the symptom not the cause, and in some instances have fed the underlying grievance.

In recognition of this historical deficiency, the PJV sought to improve its approach to handling community grievances. In 2012, the site formalised a project-level grievance mechanism and bolstered its human resources in this area.<sup>62</sup> In 2014, an independent audit report confirmed that process improvements had been achieved and that many users considered the formal mechanism to be an improvement over the previous informal and ad-hoc approach.<sup>63</sup> The audit report highlighted a number of opportunities for improvement, including issues relating to data management, investigation, escalation and close out procedures. The mechanism's main area of deficiency is the handling of land-related grievances, which constitute more than half of all reported grievances. Following lodgement, land-related grievances are managed by the Lands Department outside of the formal grievance mechanism. The audit report noted that further improvements are required to ensure transparency and accountability across the entire grievance handling

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<sup>61</sup> During the CSRSM review, both the Community Relations and Security Manager positions had been vacated and filled.

<sup>62</sup> A Grievance Manager, Grievance Superintendent and several dedicated Grievance Officers have been appointed over the two years, including one female officer and an officer dedicated to land-related grievances.

<sup>63</sup> Zandvliet, L. (2014) Porgera JV, Enga Highlands, Papua New Guinea: Grievance Mechanism Assessment. Unpublished consultancy report for Barrick PJV.

system. The majority of outstanding legacy issues relate to land, including overdue geo-technical assessments to determine the need for relocation.

Despite recent efforts to improve the grievance handling system, staff report that field-level engagements are constrained by ongoing demands for resettlement. Staff and managers report that these demands have come to dominate even the most mundane of company-community interactions. The large volume of land related grievances has impeded the ability of site-based personnel in terms of managing legacy issues and demands for resettlement. According to one manager, *“resettlement is the issue that blocks every conversation”*. This includes conversations that relate to studies and discussions designed to engage the very demand being put forward.

## **6 Previous attempts to progress off-lease resettlement**

Current demands for resettlement must be considered against previous attempts to progress off-lease resettlement at Porgera. In 2006, there was a significant attempt by the PJV to plan an off-lease resettlement as part of a proposed mine expansion. This exercise included all settlements on the SML and LMPs. The resettlement planning process was abandoned in 2008. Since this time, the operation has continued with relocation and has offered a land allowance as a means of incentivising off-lease relocation. By all accounts, abandoning the previous off-lease resettlement planning process resulted in unfulfilled expectations. This section provides a brief outline of the PJV’s off-lease resettlement planning exercise between 2006 and 2008 and the continuation of on-lease relocation as part of a decision not to proceed with the mine expansion.

In 2006, while under the management of Placer Dome, the PJV advertised for a consultancy firm to conduct a social impact assessment (SIA) for a whole-of-SML off-lease resettlement at Porgera.<sup>64</sup> Barrick agreed to progress the SIA shortly after acquiring Placer Dome and its management share of the operation. URS Corporation (URS) was successful in securing the contract and commenced work on the project in March 2007. The terms of reference required a socio-economic analysis of the conditions on the SML, including genealogies of landowners, assets surveys for eligible households, the identification of replacement land, livelihood restoration measures, and social service infrastructure. From one consultant’s point of view, the company had committed to an off-lease resettlement project and the work of the URS team was to support the resettlement planning process. Company interviewees confirmed that the tasks provided to URS were designed to assist the operation to secure full vacant possession over the lease area.

According to one senior company representative, Barrick continued with the SIA because it agreed that off-lease resettlement was a logical step for the operation at that time and that

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<sup>64</sup> In this earlier project, reference to the SML included the LMPs.

*“it was inconceivable to us that we would continue to operate in this way.”* In addition to concerns about intensifying cohabitation on the lease areas, PJV’s proposed Stage 6 mine expansion had become a major driver for off-lease resettlement. Stage 6 included a new tailings storage facility at the top end of the Kogai waste dump.<sup>65</sup> There were significant land pressures on the SML well in advance of the Stage 6 proposal. In order for the expansion to proceed, Barrick PJV would require exclusive access to additional land within the mining complex, including within the SML and LMP areas.

The fieldwork conditions during the URS study were described as being *“especially difficult”*. There were a large number of outstanding grievances in several of the on-lease settlements which made accessing the local population a challenging, and in many instances, a potentially dangerous proposition. There were areas within the lease where company personnel and consultants were not welcome and received a poor reception when they arrived in the community. Consultants described a situation in which communities were internally fractured with deep levels of mistrust both between households and of the company. The relationship between PJV and the communities on the lease area was at such a low that consultants were spending significant time undertaking basic engagement tasks.

The original terms of reference allowed six months for URS to complete the SIA. Despite the state of records maintained by the site, the challenges of law and order, and the community-company relationship at that time, the URS team delivered their SIA study in 2007.<sup>66</sup> Additional contracts were subsequently negotiated to allow for the development of Resettlement Action Plans (RAP) and to complete critical elements, such as landowner genealogies. One consultant involved in the URS assignment stated that more time and effort was required to ensure that people understood what off-lease resettlement entailed. Without dedicated engagement and awareness raising activities it was difficult to guarantee that people were making informed decisions about resettlement.

As resettlement planning progressed, the cost and complexities of implementing a full scale off-lease resettlement project became increasingly evident.<sup>67</sup> RAPs were drafted by URS in early 2008, but were not finalised. A series of budget estimates were also produced suggesting that the whole-of-lease resettlement proposal was unaffordable. One company interviewee said, *“the price tag was just jaw dropping”* and explained that the budget estimations changed the viability of the Stage 6 development. The combination of technical issues, haulage costs, capital expenditure against the price of gold, and level of cost and complexity associated with resettlement brought the whole Stage 6 expansion into

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<sup>65</sup> This location was at a higher elevation than the pit and involved significant haulage costs.

<sup>66</sup> URS Corporation (2007) PJV Special Mining Lease: Landowner Resettlement Social Impact Assessment. Unpublished consultancy report for Barrick PJV.

<sup>67</sup> For discussion on the the difficulties of aligning international standards and planning models in this context see Gilberthorpe, E. and Banks, G. (2012) Development on Whose Terms? CSR Discourse and Social Realities in Papua New Guinea’s Extractive Industries Sector. Resources Policy. 37(2): 185-193.

question. By early-2008, a decision was reached by Barrick PJV not to progress with either the Stage 6 expansion or the proposed resettlement. One company interviewee said that *“the fallout in the social arena has gone on for years”*.

## **7 Overview of the progressive off-lease resettlement pilot project**

In the early stages of the mine’s development, on-lease relocation seemed workable. The mine life was considered to be short, relocation to areas on the lease appeared to be convenient, and landowners preferred to stay close to their original lands. However, 27 years later in 2015, the cumulative effects of transactional, on-lease relocation and significant in-migration at Porgera have become detrimental to the community and the company. All parties indicate that they are seeking a solution to the situation on the lease area.<sup>68</sup> One of the solutions being considered by Barrick PJV is progressive off-lease resettlement, commencing with a pilot. To assist the reader in understanding what Barrick PJV is proposing, this section describes the status and key features of the pilot project.

### **Status of the pilot framework**

In 2013, the PJV commissioned an external consultant to assist the company in developing a pilot resettlement framework following a strategic review of relocation.<sup>69</sup> Barrick PJV has stated that the resettlement framework is a draft document and acknowledges that stakeholder engagement and input will be required before it can be finalised. A land tenure study that examined options for securing destination land was also completed during the strategic review.<sup>70</sup> As at August 2015, the preliminary framework presented by Barrick PJV to CSRSM identified Pakien and Panandaka Ridge as the two pilot resettlements. With the necessary corporate-level approvals in place, a senior manager has been appointed to progress an engagement and planning process for the pilot.<sup>71</sup> A resettlement project team was in the process of being assembled at the time of the CSRSM review.<sup>72</sup>

An initial series of meetings had been convened by Barrick PJV in PNG to progress discussions around the off-lease resettlement pilot project. To date, meetings held at the national level have focused on establishing a coordinating committee that includes the

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<sup>68</sup> The issue has recently moved up the political agenda in PNG. In 2015, the Lagaip-Porgera Member of Parliament raised the issue of landowner occupation of the SML on the floor of Parliament. The Prime Minister responded by indicating that he would ask his Minister for Mines to prepare a Ministerial Statement for Parliament on issues at Porgera.

<sup>69</sup> Gerrits, R. (2013) Resettlement Framework for Progressive Off-SML Resettlement, PJV/Barrick. Unpublished consultancy report for Barrick PJV.

<sup>70</sup> Fingleton, J. (2013) Porgera Joint Venture: Land Tenure Options for Resettlement. Unpublished consultancy report for Barrick PJV.

<sup>71</sup> This position has been established as a dedicated resource for the project.

<sup>72</sup> The Resettlement Manager’s position was advertised on 14 August, 2015. The draft project team structure includes a senior manager and a number of dedicated positions, including for livelihoods and community development, community engagement, and building and construction.

Prime Minister's office, the MRA, the Department of Provincial Affairs and Local Government, and the Department of Lands and Physical Planning. At these meetings, Barrick PJV has presented information about the pilot and sought clarification about the involvement of government agencies in resettlement planning and implementation. Several Barrick interviewees stated that buy-in from these parties was considered a *"pre-requisite"* for proceeding with the pilot. At the same time, government interviewees stated that in order to 'buy in' to the pilot, they need to see more detail from PJV about what the actual plan entails. One government representative said, *"We see this as Barrick's problem, not ours. We need to see their proposal for ourselves and understand what their expectation for assistance is, exactly."*

Barrick PJV had also convened a Local Resettlement Committee (LRC). Membership of this committee aims to include a broad range of stakeholders including the PLOA, the MRA, youth representatives and women's groups. A Charter outlining the committee's purpose and responsibilities has been drafted. Barrick PJV also intends to establish community-level committees with the two pilot communities. A series of preliminary focus group discussions about off-lease resettlement were held in these two settlements in 2013.<sup>73</sup> Transcripts from the focus group discussions indicate that community-level participants do not have a clear understanding of what resettlement would involve or what risks it might carry for themselves and their families.

As the pilot is at concept stage, many details are yet to be finalised, including formal agreements with the two pilot settlements and RAPs. The most recent census data for the two pilot settlements was collected in 2010 and there is no recent genealogy data available to the operation. Destination lands have not been identified and the mechanism through which land tenure will be secured remains uncertain. Given the stage of the pilot, the status of these key elements is perhaps understandable. However, taking into account that the mine has been in operation for 27 years, it is a concern that accurate and complete census and genealogy data is not available to the operation.<sup>74</sup> The absence of current data is said to be one of the project's most significant challenges. One interviewee explained that, *"Until you can identify in substance who is on the ground, you don't know who or what you are working with. Until this pilot understands who it is engaging, it will be very difficult."*

### **Overarching logic of the framework**

Beginning with the two pilots, the progressive off-SML resettlement model is Barrick PJV's response to a number of stated problems. These include:

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<sup>73</sup> Tanorama Limited. (2013) Fokas Grup Diskasen Blong Pakien na Panandaka Risetelmen Komuniti, Porgera Ripot. Unpublished consultancy report for Barrick PJV.

<sup>74</sup> Several interviewees raised concerns about the reliability of the genealogy data available to the site noting that it was largely incomplete, and in many instances incoherent.

- a shortage of land for both the project and the community
- congestion on the lease area that exacerbates safety and law and order problems
- an increasingly significant level of social impact from mining activities
- a mounting liability in terms of the resources required to resolve these issues
- ongoing demands from landowners to be moved off the lease area.<sup>75</sup>

Interviewees internal and external to the company also explained that conditions on the lease area will have a bearing on the negotiations for the SML renewal and the MRA's interest in incorporating a requirement for off-lease resettlement into a revised MOA. Some company interviewees considered the pilot to be a proactive effort by the PJV to demonstrate progress on this critical issue.

Criteria for the selection of the pilot settlements is described in the framework as: (i) the existence of geo-technical risk, (ii) particularly adverse environmental and social risks and (iii) PJV's current and future land requirements. The two pilot settlements are regarded as severely impacted by mining-related activities. It is also understood that informal agreements have previously been made to relocate both settlements. The rationale for selecting these settlements as pilots was not clear to all interviewees. Some interviewees believed that from an impact perspective, other settlements were just as worthy. One external interviewee asked, *"Are these really the priority communities, or are they just considered more 'feasible' for Barrick?"* When this question was posed to a company interviewee, they responded by saying that *"regardless of which settlements are targeted for the pilot resettlement, it is unlikely that there will be consensus among stakeholders."*

Company interviewees offered four different explanations for why the project is being considered a 'pilot'. First, because it differentiates this exercise from the whole-of-SML off-lease resettlement project of 2007, which was discontinued when the Stage 6 expansion did not proceed. Second, a mining-induced resettlement of this size and complexity has never been attempted in PNG. This pilot effectively provides a 'test case' for future resettlements in mining. Third, this is the smallest workable version of the off-lease resettlement proposition at Porgera. One senior manager explained that a pilot enables the company, *"to see if we can do this without raising expectations, or causing chaos."* Fourth, a pilot does not commit the company to additional resettlements. The basis upon which additional

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<sup>75</sup> On the 2 June 2015, the Chairman of the PLOA addressed a letter to the CEO of Barrick outlining a list of concerns associated with Zijin's buy-in. The 'resettlement' project was noted in the list of six issues. For an online copy of the letter: <http://www.porgeraalliance.net/wp-content/uploads/2015/06/Barrick-Sales.pdf>. In an earlier press statement released by the PLOA on the 25 February 2015 relating to Barrick's intention to sell its share in the PJV, resettlement featured as both the first *and* second issue in a list of seven issues. An online copy of the statement is available at: <http://www.porgeraalliance.net/2015/02/porgera-landowners-petition-png-government-with-ultimatum-regarding-barricks-intention-to-sell-porgera-mine/>. It is also worth noting that calls for 'resettlement' from on-lease communities have been documented in early studies. See for example: Banks, G. and Bonnell, S. (1997). Porgera Social Monitoring Programme, 1996 Annual Report, Draft Action Plan 1997, and 1997 Action Plan. Commissioned by the PJV.

settlements would be resettled will be contingent on whether the project is considered a 'success'. What would constitute a success for PJV or other stakeholders has not been defined at this point.

Several internal interviewees indicated that resettlement would only proceed if it proved to be affordable. One manager said, *"Cost determines viability. This might be do-able, but if it's not affordable, we won't proceed further."* Barrick Gold has made an internal commitment to fund the development of the pilot based on preliminary cost estimates. Additional modelling is required to determine the full cost of implementing the pilot. The status of the company's genealogical records and population data makes it difficult to determine how many households will require resettlement and, in turn, how many relocation packages the company will need to finance. The government does not have a sense at this stage of what cost it may be expected to carry if resettlement activities progress, and has therefore not commenced its own estimation process or committed any resources.

The pilot resettlement project is expected to carry forward a similar eligibility criteria that is used for on-lease relocation. That is, three categories covering original landowners, landowner descendants and long-term residents who have migrated onto the lease. Short-term non-landowners are not reflected in the existing criteria and will not be entitled to a resettlement package under the pilot's eligibility and entitlements framework. Under the existing on-lease relocation approach, improvements compensation and/or transportation assistance is provided to short-term non-landowners on a case-by-case basis. It is expected that the pilot will develop a standard approach for handling short-term non-landowner cases.

### **Features that differentiate the pilot from current practice**

There are a number of features that will differentiate the resettlement pilot from the current relocation approach. This section outlines the key elements that PJV is proposing for the pilot. These new elements include:

- supporting households to identify and move into a settlement off the lease area
- shared responsibility between government, company and landowners
- replacement land with residential plots and areas for small-scale agriculture
- a livelihood restoration and improvement component
- provisions for housing, physical infrastructure and social services
- moving households as a group rather than on an individual basis
- including household heads in the negotiation process, as well as agents
- broad-based engagement that includes a diverse group of stakeholders
- developing a comprehensive social monitoring program
- improvements to systems and knowledge management systems
- support for vulnerable persons.



The most obvious difference between the current and proposed approach is that the company is looking to move households away from the lease area. The ultimate aim is to achieve vacant possession over the lease area. Vacant possession would require the departure of all landowners and in-migrants from resettled communities and the establishment of a system to ensure that de-populated land remains unoccupied. At the time of undertaking the review, this aspect of the pilot was still being considered internally within PJV. Interviewees agreed that vacant possession could only be achieved if resettlement was a 'shared responsibility', with the active involvement and support of the government and the landowners. If vacant possession is achieved by the PJV, landowners would still retain customary title over their original land.

Barrick PJV's positioning of the pilot as a shared responsibility between the company, community and the government is a statement about the significant resourcing that will be required in order to implement a successful resettlement project. In addition to PJV needing to meet their immediate obligations for the project, it is important to recognise the role of government in providing infrastructure and social services for citizens, and for sustaining resettlement communities post mine closure. Company interviewees were unanimous in stating that the pilot's success was contingent on government involvement. Reflecting this common view, one senior manager said, *"This would be very difficult to do without a good level input and commitment from the national government."* The shared responsibility model also recognises the role of landowners in maintaining vacant possession over depopulated areas of the lease. One manager said, *"We could never overlook the landowners in making [vacant possession] work. They are an incredibly important player. In the absence of landowners we would have full blown anarchy."*

Another key difference is the change in terminology: 'resettlement' rather than 'relocation'. This shift reflects an attempt by Barrick PJV to align the pilot with IFC PS 5 and include new elements and processes that have not featured in Barrick PJV's previous relocation efforts. During interviews with company personnel, it became apparent that this change in terminology is not meaningful for everyone. For some interviewees, use of the word 'resettlement' merely represents a change in wording, rather than signalling a change in practice. Despite what was taken by some interviewees to be a matter of terminology, the pilot resettlement framework will include new elements such as replacement land, physical infrastructure and services, and a livelihood restoration component. At this early planning stage, the details of these elements have not been finalised.

Other design differences relate to engagement with stakeholders and community structure. Under the framework, one of the stated principles is to move households together as a group in order to preserve the existing community structure. This is in contrast to the current practice where households are relocated on an individual basis following an identified mining impact. Another difference is that the PJV aims to engage directly with household heads in order to ensure that households receive their full entitlement and

clearly understand the proposed resettlement agreement. This signals a departure from the current relocation approach where engagement centres primarily on negotiating relocation packages with agents. Logistical arrangements are made with individual households only after an agreement has been reached with the agent. Under the progressive off-lease resettlement approach, it is expected that clan agents will remain engaged in the negotiation process and provide input into planning and implementation processes through the community-level committees. However, the emphasis will be on household-level engagement and agreements.

Beyond household-level engagement, Barrick PJV has stated an intent to conduct broad-based engagement with a diverse range of stakeholders about the pilot project and the progressive off-lease resettlement model. One PJV representative explained that the intention is to engage directly with local women, men, youth and vulnerable persons to raise awareness about the project and to establish open channels of communication with households in the pilot communities. This is essential if the community is to understand both the risks and benefits of the resettlement, and if households are to make informed decisions about the project. The company has also stated its intention to apply participatory processes at different stages of the project. The options and implications associated with the use of participatory processes will need to be defined.<sup>76</sup> According to Barrick PJV, the approach will be outlined in an engagement plan.

Finally, as part of the pilot resettlement project, Barrick PJV has stated an intention to build a more reliable set of information and knowledge systems than what is currently used for on-lease relocation. One PJV representative envisaged that genealogies, census data, and household and asset surveys would all be updated as part of the pilot. At the time of the CSR review, scopes of work for the census and household asset surveys were in the process of being drafted. It was explained that these studies would be completed first in the pilot communities, followed by other priority settlements if the pilot is considered successful. Barrick PJV has also stated that it will improve its information and data management system to ensure that critical data is secure and to make planning information available to relevant parties. The current backlog of historical data that is not yet entered into the lands management system is expected to be addressed through the allocation of additional resources. The capability of the existing systems software has been identified as an area for further enhancement. The aim is to establish an information management system that has capacity to store and retrieve social monitoring data for the purposes of evidence-based decision-making.

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<sup>76</sup> For example, the level of decision making power that will be made available to stakeholders and whether the use of participatory processes is likely to disrupt existing power dynamics among the various stakeholders.

## 8 Opinion on the suitability of the pilot project

This section provides an opinion on the ‘suitability’ of the resettlement pilot project being proposed by Barrick PJV. In contemplating suitability, we have considered the ‘do-ability’ of different project elements; that is, whether different components are feasible, separately and alongside other project elements. We also considered the ‘defensibility’ of different elements; that is, the extent to which the project can justify its aims and intent, and what changes or actions might be required where the project logic does not appear to be coherent.

In preparing our opinion, we reflected on the history of the Porgera mine and the complexities of the operating context, including the Porgera Valley and more broadly in PNG. We have relied on the insights offered by research and consultant reports and the experience of individuals who are currently, or who were previously, engaged with the different dimensions of the pilot proposal. This opinion is based on the information available at the time of the review and a genuine effort by the authors to understand past relocation practice, the present situation on the lease and future aspirations for the resettlement project. The opinion is organized into 11 statements with several sub-points on specific issues for Barrick PJV to consider.

1. The progressive off-lease resettlement pilot at Porgera is being planned in a context of weak governance, low resourcing and limited capacity. Resourcing and capacity issues are present among all stakeholders. Many stakeholders expect progress to occur immediately and for the project to move at a rapid pace thereafter. The challenges associated with proceeding under these circumstances, where critical dependencies are yet to be defined, should not be under-estimated by the PJV, the government or the community.
2. Under this proposal, responsibility for off-lease resettlement will be shared between the government, company and community. What that means for each of the stakeholders involved in this process is not yet clear. What is clear is that once people are no longer residing on the lease area, the balance of responsibility will shift from the company to other parties. Under these circumstances, the shared responsibility model must acknowledge that not all responsibilities can be shared. Responsibilities that are particular to specific actors, agencies and specific stages of the planning and implementation process need to be defined. For the shared responsibility model to be considered suitable, parties must:
  - a. clarify the nature and timing of responsibilities that are to be shared between the state and the developer as the two primary duty bearers
  - b. clarify the resources required for the life of the resettlement project, including how these resources will be secured following mine closure

- c. develop an engagement plan to incorporate landowning communities and other directly affected parties into the shared responsibility model.
  3. For the shared responsibility approach to achieve its stated intent and be accepted by all parties, there must be an element of joint decision making. Parties should commit to a joint decision-making process where no single party has ultimate power of veto; that is, no party can decide unilaterally whether to proceed or abandon the pilot. If there are limitations that must be taken into account (e.g. budget and timing constraints etc.), these must be disclosed in good faith so that parties are able to make decisions with complete information.
  4. There is a consensus on the need to relieve pressure on the mining lease. At this stage, however, there appears to be limited understanding at the community-level of what off-lease resettlement will involve. One concern is that local demand for resettlement is being driven by the perception of 'benefit' (i.e. a resettlement package) rather than an understanding of the resettlement in its entirety. Assessing community-level understanding and testing the demand for off-lease resettlement is a suitable objective for this pilot. This includes:
    - a. discussion that moves beyond the drivers for resettlement, to a discussion that examines the full scope of the pilot project
    - b. discussion on key elements:
      - i. proposed resettlement package (including how second generation landowners and short-term non-land owners will be treated under the eligibility criteria)
      - ii. identification of destination lands and land tenure options
      - iii. the physical relocation process itself
      - iv. approach to livelihood restoration
      - v. securing vacant possession of the lease areas
      - vi. associated security considerations.
  5. For the pilot to be considered suitable, Barrick PJV would need to further invest in preparatory and planning work. To move the pilot from concept stage to a draft plan that stakeholders can consider and engage with, several key elements will need clarification and development. These are:
    - a. A due diligence process on replacement land. Securing land is a critical challenge for all parties involved. Without destination land, the pilot cannot proceed. In terms of suitability, a due diligence process would need to consider the full spectrum of social risks and benefits that would accrue to both resettlement and receiving communities.
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- b. A detailed livelihood restoration strategy. Before developing the strategy, PJV will need to understand what level of income is generated by current household livelihood activities. If households agree to resettle, livelihood activities and income levels in the resettlement location must be attractive enough to prevent settlers from moving back on to the lease. Moreover, the suitability of the resettlement pilot will be contingent on ensuring that resettled families are food secure, throughout the physical relocation and post-relocation phases of the resettlement.
  - c. Conflict and security assessment. Violent conflict and tribal warfare are a real and present danger for people living within the Porgera Valley. The degree to which different dimensions of resettlement have potential to incite conflict has not yet been explored.
- 6. Given that the pilot is at a concept stage, the analysis of risks and potential harms associated with the resettlement proposition have not been fully examined. Until the social risks of planning and implementation are better understood, the 'suitability' in terms of social and human rights risk cannot be determined. Over and above the risk areas noted above, the project must also consider:
  - a. The impacts and opportunities of the project from a gender perspective. As it stands, the pilot framework does not consider how resettlement activities will intersect with gender issues in the community. Barrick PJV should incorporate lessons from the recent Remedy Framework process, the women's empowerment stream of the Community Development Unit, and prior studies that have documented the gender dimensions of mine-related impacts.
  - b. How vulnerable persons will be identified and supported through the planning, implementation, and post-relocation phases of the pilot. There are vulnerable people residing within and outside of the SML. These people will require special consideration from Barrick PJV and the government to ensure that they are not further disadvantaged by the resettlement process. A vulnerability framework would need to be defined for the pilot to be considered suitable.
- 7. It is estimated that more than half of the population residing in the pilot communities are 'short-term non-landowners'. Under the current pilot framework, short-term non-landowners are not eligible for a resettlement package. It is our opinion that:

- a. This position is not defensible from the vantage point of the international standards. The eligibility criteria and entitlements package needs to reflect the duration of time residents have lived in the area, the extent to which their livelihoods are tied to their place of residence, and whether other social and economic entitlements will be disrupted by relocation.
  - b. The framework needs to further explain how Barrick PJV will manage the displacement of short-term non-landowners if they are not considered as eligible persons. Without strong social and economic incentives, there is a risk that short-term non-landowners will return to the lease area. Defining the risk of return is an essential element of the project.
8. The knowledge and information systems are inadequate and do not form a suitable basis for the pilot project. Genealogy and census data held by the company are out of date and incomplete. This presents a major barrier in terms of determining how many people will need to be resettled, and ensuring that resettlement packages are allocated to the right people. Without accurate information about how many households will be eligible for resettlement, neither PJV or the government will be in a position to effectively determine program and servicing costs.
9. Resettlement requires specialist skill sets, with dedicated teams and resources. Brownfield resettlements are known to be both more expensive and difficult than greenfield cases.<sup>77</sup> This is without taking into consideration the complex myriad of factors that are present in Porgera. There is a need to significantly extend the level of resourcing at the operational level even if the pilot is constructed in the most commitment-minimal way – such that the first task is to ‘test’ whether stakeholders are prepared to accept both the risks and benefits of the proposed resettlement.
10. While the pilot is being planned and implemented, the remaining communities on the lease will still be exposed to the current set of issues and risks associated with living on the lease. These issues should not be deferred or made contingent on the success of the pilot. For the pilot to be suitable in this context, Barrick PJV would need to demonstrate that remaining settlements would not be deprioritised as a function of a major project coming on stream.

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<sup>77</sup> We refer to brownfields resettlement to emphasise the point that resettlement is often undertaken (i) during the operational phase and/or (ii) at sites characterised by the industry as ‘greenfields’, but where a mining legacy already exists. See: Owen, J. and Kemp, D. (2015) Mining-induced Displacement and Resettlement: A Critical Appraisal. *Journal of Cleaner Production*. 87: 478-488.

11. The proposal is for a brownfield resettlement with 27 years of accumulated legacy. Part of this legacy is that PJV has continued to relocate individual households with few controls over the final destination of families or monitoring to track or learn from the exercise. PJV has indicated that it will only proceed with future resettlements if the pilot activities prove to be successful. For the pilot project to be considered suitable, the PJV will need to lead the establishment of a world-class monitoring, evaluation and review process with regular and transparent reporting on progress, including against agreed 'success' indicators.