

## Original article

## Unseen existences: Stories of life from Venembeli, Papua New Guinea

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## ABSTRACT

This article presents stories of life from Venembeli, a remote village in the hinterlands of Papua New Guinea. Caught up in a contentious mining development, villagers both long for and fear the development promised by global capitalism. But with a forty year development history, the proposed Wafi-Golpu mine has become the only lens through which the present or future is imagined and understood. We contend that this cultural hegemony has twisted the way stakeholders understand the mine's outcomes and impacts. Mindful of the power of language and dominant cultures, we adopt a refined version of the Melanesian *tok stori* methodology to capture stories that, together with illustrations and our own observations, make visible and amplify the stories from Venembeli. The stories illustrate a different reality to those presented in the usual western, technical and reductive impact assessments; offering insights into a complex human story that requires contemplation and empathy if the communities are to be valued, heard and respected. The outcome of telling these stories is uncertain, but this emancipatory participatory action research will help readers and stakeholders to better understand the community, and to prioritise their human flourishing to ensure positive, rather than negative mining legacies.

## 1. Preface: seeing Venembeli

Built around a hill and nestled amongst peaks on all sides, the sun does not rise quickly in Venembeli.<sup>2</sup> With the light comes the sound; roosters crowing, pigs squealing, dogs wrestling, birds singing and beetles rustling, alongside the sound of splashing water nearby and the thrum of the river at the bottom of the hill. Before the sun takes over, the lights from houses shine brightly as they illuminate their surrounds through the night. The recent advent of affordable solar has made artificial light a reality, a fact that the constant illumination seems to celebrate, or at least bear witness to. Then come the sounds of people, children waking, beginning to play; women starting their daily work, clinking pots, lighting fires, and preparing *kaikai* (food). The volume rises as the light slowly increases with the direct beams of sunlight making their way up the hillside.

There are 90 houses in Venembeli built mainly using bush materials

from over ten species of *diwai* (tree). Roofs are made of overlapping sago leaves and kunai grass; floors from sawn timber beams or split bamboo (see Fig 1.). Many of the homes display modern additions such as steel ridge capping, steel roofs (*kapa*) and netted windows. There are some houses that would not look out of place in Lae, the capital of Morobe Province, with interior walls lined and painted. The houses are scattered in small clusters, an organic and friendly layout that both connects and separates extended families. These clusters are surrounded by many fruiting trees including; rambutan, guava, coconut, mango, pineapple, banana, sago, *galip* nut, pawpaw, breadfruit and pandanus, as well as *buai* (chewed with mustard and lime to produce a mild stimulant), *noni* (a medicinal plant), herbs and bright colourful flowering plants - the village is vibrant with life. Next to, or adjoining most houses is the kitchen, another elevated structure typically made from bush materials. Inside, sitting on a rectangle of dirt and ash is the wood fire, a slow-burning masterpiece that generates enough heat for cooking without wasting fuel or producing excessive heat or smoke. A set of bush pole shelves, with washed pots, cups, plates and utensils sits either inside or

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<sup>1</sup> Acknowledging both their centrality and contribution to this research.

<sup>2</sup> Also spelt Venembele (as in the EIS documents), we continue to use the spelling Venembeli as first told to us in the Village without claiming that either is more correct.



Fig 1. Venembeli.

just outside the kitchen. Not every house has a tap, but our house has running water outdoors, gravity-fed from a small dam further up the hill.

Home to over four hundred people, 40 per cent of whom are children under 16, Venembeli is in a state of transition, adjusting to the influences and impacts of colonisation, Christianity, cultural change and the fluctuations of the international gold price. This is neither a traditional paradise nor a modern dis/utopia; just a community trying to maintain traditions and adapt to change. Venembeli, along with the nearby villages of Hekeng and Nambonga<sup>3</sup> is predominantly subsistence-based, relying on the local environment for their drinking and washing water, bush (gathering, hunting, fishing) and garden foods, medicines, housing materials, cash crops, alluvial mining, play and cultural uses. Like many other communities in Papua New Guinea (PNG), Venembeli is largely Christian but retains beliefs and customs following older, pre-Christian traditions. Gender divisions are sharp and reflected in the overwhelming male-dominated leadership structures, domestic roles, gardening, socialising, and disparate levels of education, voice and power. All three villages are expected to be resettled to allow the proposed Wafi-Golpu mine to proceed; in Venembeli's case, the proposed resettlement location is now uncertain, but at the time of research (2020) there were no resettlement options near a river comparable to the Wafi River.

## 2. Introduction

Using an emancipatory,<sup>4</sup> participatory action research (PAR) approach to intentionally serve those who are at risk of becoming

<sup>3</sup> Despite having previously co-researched with the Hekeng, Nambonga and surrounding communities, this research is restricted to Venembeli, though we expect similar stories could be shared in those communities.

<sup>4</sup> Encouraged by Mary-Rose and Rita (section 3.), we realised that we needed emancipatory methodologies, though we understand that emancipation is not ours to deliver or even define.

marginalised and dispossessed by mining development, we<sup>5</sup> share stories about life and relationships in Venembeli. Together we make a clear statement of existence and life that does not require another event to define it. Mindful of the power of language and dominant cultures, we adopt a refined version of the Melanesian *tok stori* (literally, to share stories) methodology, which we describe as *tok stori-tok ples* (sharing stories in your language), as we sought to uncover and describe some truths about human and environmental relations in the village of Venembeli.

We start with a discussion of the *tok stori-tok ples* methodology, which builds on earlier work<sup>6</sup> and provides a foundation to relate, discuss and understand a series of vignettes that describe aspects of life in Venembeli. While not a comprehensive ethnographic study, the stories from Venembeli nevertheless provide insights into village life and the importance of the Wafi River. The stories are brought to life by images, some from the community and some from Eugene, an artist and teacher from Lae who heard and then visually captured the stories shared with us. Keen to let the stories speak for themselves, we close with a brief discussion on understanding impacts and social complexity. Being mindful of our responsibility to our co-researchers (the Venembeli community), this article reminds us to genuinely see and value the lives

<sup>5</sup> Authorship and ownership are complicated in this article. With equal but differentiated roles, some separation is required. In this article 'we' refers to the University Team as the article's principle writers. Whereas the Venembeli Community contributors, who provided the local stories, are described as co-researchers; we use the term co-researcher rather than research participant to describe Venembeli contributors because they were involved in shaping the research, the methodology and even the analysis in our process of repeatedly returning to the community to talk through the research findings. While not completely satisfied with this separation, it was deemed necessary to ensure responsibility for the final text lay with those who wrote it.

<sup>6</sup> Part of a larger PAR project, the first article (Roche, Walim, & Sindana, 2019) explores extractive-led development and communities through the concept of *gupla sindaun* (also spelt *gupela*), which translates as human flour-ishing. The second article (Roche et al., 2019) explores potential impacts using a dispossession lens, translated as *maining come rausim gupela sindaun blong yupela*.

of people in the Global South.

Conversely, the juxtaposed reality is that our interest in Venembeli, along with many readers and stakeholders,<sup>7</sup> was prompted by development interests from the Global North. In this case, a proposed mine that positions Venembeli as a contentious site of opportunity and impact. Venembeli typifies how our attention to, and interest in, the value of others' existence is often not appreciated until a Western development scheme is proposed; a sad indictment on our assumptions about people, social change and development. Nevertheless, we seek to better understand and assist the community by responding to an assessment and approval process for the Wafi-Golpu<sup>8</sup> mine that has failed to genuinely 'see' and hear the people who live in Venembeli. Indeed, the main impact assessment document, the environmental impact statement (EIS),<sup>9</sup> has rendered the villagers of Venembeli as two-dimensional beings and their land fit only for mineral exploitation. This regulatory assessment gives primacy to identifying potentially positive intentional development outcomes while it minimises or ignores the many potential negative mining legacies created by both intentional and immanent development.<sup>10</sup> We deliberately counter this neoliberal<sup>11</sup> and dispossessive process with a glimpse of the community that is Venembeli. Our approach can thus be juxtaposed against a mining design, impact assessment and technocratic approval process that prioritises an extractive culture while subverting and rendering unseen the local way of being.

We want to emphasise that this article is intentionally written to give primacy to local voices, which in the telling, raises questions that cannot be answered here without overpowering their stories. In that sense the article is, in-part, a performative work that reinterprets and honours the intent of our *tok stori-tok ples* methodology. Valuable in their telling here, the stories both contribute to and invite further work. An obligation we will partially fulfil in a companion article which uses PNG's mining experience, impact assessment (IA) theory and practice and Community stories to analyse the Wafi-Golpu EIS (Roche et al., review).

### 3. An evolving methodology

These stories<sup>12</sup> were recorded over three visits to Venembeli throughout 2019 and 2020, which built on an ongoing engagement with the community since 2014.<sup>13</sup> Some of the stories were shared at the river where villagers gather to wash bodies, clothes and dishes, to play and to engage in alluvial mining. Other stories were shared during research

<sup>7</sup> Stakeholders include: villagers and communities; local leaders; local, provincial and national government; regulatory bodies; media; community organisations; researchers; global mining companies; financiers; consultants; and employees.

<sup>8</sup> Named after local landmarks, the proposed mine is known as the Wafi-Golpu Joint Venture (WGJV) a 50/50 joint venture between Newcrest Mining from Australia and Harmony Gold from South Africa.

<sup>9</sup> The impact assessment for the proposed Wafi-Golpu will be further analysed in a forthcoming article, the environmental impacts statement is available here <https://www.wafigolpujv.com/eis987654321>

<sup>10</sup> We see the distinction between intentional development and immanent development, (unplanned, chaotic, organic) as critical to understanding extractive-led development in PNG (described by Banks et al., 2013, 2017; Cowen and Shenton, 1996) which we have explored elsewhere (Roche et al., 2019, 2019b).

<sup>11</sup> Following Harvey (2006) neoliberalism describes an approach where entrepreneurial freedoms are considered as the best way of maximising human well-being.

<sup>12</sup> Co-researcher comments have been anonymised to protect vulnerable individuals and groups. For further details see discussion in Roche, et al. (2019b). We have also refrained from using specific stories, especially in relation to courtship and women that could identify individuals in a small community.

<sup>13</sup> The authors have visited Venembeli approximately ten times since 2014, initially over of several days (also visited other communities), then finishing with three, one weeklong engagements during 2019 and early 2020.

briefings and discussions stemming from research in previous years, spontaneous conversations while preparing or eating *kaikai* and drinking tea, when villagers deliberately sought information from the visiting researchers, or in meetings under houses away from the hot sun. Most conversations attracted others, a sort of organic tropical snowballing recruitment that drew in new community co-researchers. Interviews were in English or *Tok Pisin*<sup>14</sup> with notes and quotes translated by the authors in the field and at an end-of-trip two-day workshop.

The ethics of engagement were core to project design and continually re-evaluated. Documented in part in our earlier work (Roche et al., 2019a, 2019b), our initial engagement in Morobe was invited, with our outreach slowly spreading to other communities. While formal university consent procedures proved awkward in this context (Ghosh, 2018; Roche et al., 2019), our repeated visits and purposefully emancipatory approach resulted in relationships that could no-longer be described as merely researcher and participant. Indeed, we developed friendships and obligations that surpass this work. Rather than being a journey from anthropology to activism, this engaged anthropological work grew from frustration with the unjust outcomes of extraction (Kirsch, 2006, 2014, 2018)<sup>15</sup>; instead of beginning with anthropology and finding injustice, we found injustice and turned to ethnographic and PAR methods.

We note the value of Burton's (1991) early work on social mapping in PNG which would usefully inform any IA in PNG. Also valuable was his approach - evidenced by the application of the multidimensional poverty index - to understanding the impacts from the Hidden Valley mine and the willingness to make the consultants reports publicly available (Burton, 2013a, 2013b, 2013c). Longer form ethnographic methods in Morobe also have much to offer in developing a deeper understanding of existing and changing social relations and how these might be affected through mining and other development (see Bacalzo, 2019; Bacalzo et al., 2014; Beer and Church, 2019; Beer and Schroedter, 2014; Halvaksz, 2008, 2015; Kuir-Ayius, 2016; Moretti, 2006). Whereas our focus is on development, with an approach that seeks to deliberately unsettle the orthodoxies of extraction (Cornwall, 2018). Aware that this work creates more questions than can be appropriately answered here, we intend to reflexively and critically explore the project approach and methodology in forthcoming publications.

Our methodology has evolved over time as we responded to the community co-researchers and learnt more, incorporating or being influenced by new (to us) concepts. One important conversation influencing our approach occurred in early 2019 with Mary-Rose and Rita from the Melanesian Organisational Development Ltd (MODE),<sup>16</sup> an NGO based in Lae. Interestingly, the discussion centred around two concerns: the need for a Melanesian perspective with a terminology capable of seeing Melanesian values and customs; and a perceived lack of freedom from Western, capitalist and Christian hegemony.<sup>17</sup> That particular *tok stori* included reference to antecedents, or at least precursors of recognition. First, in the *Pacific Way* (Croccombe, 1976), a term later repurposed by Boydell (2016) when recognising the conflict and contestation between Western and customary values. Second, in the *Melanesian Way* (Narokobi, 1983), a creative term with ethereal qualities of an authentic (not a copy of other cultures) and communal modality marked by an interdependence with the animal and plant world.<sup>18</sup>

<sup>14</sup> *Tok Pisin* is the lingua franca of Papua New Guinea.

<sup>15</sup> We also recognise the lively debate about the relationship between anthropology and the extractive industry in PNG that has informed our work (see, for example Ballard and Banks, 2003; Burton, 2014; Coumans, 2011; Hyndman, 2001; Jacka, 2018; Kirsch, 2007; West, 2016)

<sup>16</sup> MODE closed in January 2020

<sup>17</sup> The term hegemony is applied generally, as in a dominant ideology that permeates thought and action.

<sup>18</sup> See Dobrin and Golub (2020) and Bashkow (2020) - and the associated special edition of the Journal of Pacific History (Vol 55:2) - for an in depth discussion of Narokobi's influence on PNG and the Melanesian Way.





Fig 2. *tok stori-tok ples* by the River.

Both of these concepts encouraged us to find a language and methodology that genuinely saw, heard and respected a Papuan<sup>19</sup> existence.

Having started our earlier engagements with a *yarning* approach,<sup>20</sup> it was just a matter of time and learning before we adopted the more Melanesian, *tok stori*, methodology (Geia et al., 2013; Yunkaporta and Kirby, 2011). Described as a "...Melanesian Pacific relational mode of communication widely practiced and understood..." it is a methodology capable of recognising other ontologies (Sanga et al., 2018, p. 3). Or to put that more practically, *tok stori* is a two-way process of disclosure with an emphasis on relationality and mutuality (Stead, 2013) that encourages and facilitates group discussion where "...a story is constructed by speakers and listeners" (Sanga and Reynolds, 2019, p. 12). These perspectives gave structure and process to our purposefully emancipatory and participatory approach. Though in applying *tok stori* here, we acknowledge the difference between the longstanding use of *tok stori* amongst *wantoks* (close relations/ships marked by relational reciprocity) and our more purposeful and contemporary PAR application (Sanga et al., 2018). This difference is illustrated by the fact that our Papuan fieldworkers were more successful than the Australian in achieving an emotional connection in *tok stori* (Fasavalu and Reynolds, 2019). We suspect this could be due to cultural or personal differences, language barriers, or from the legacy of colonialism that underscores privileged researchers from settler countries regardless of their good intentions.<sup>21</sup> Critically for this work, *tok stori* is a process that celebrates the very idea of Melanesianism; taking an intentionally decolonial approach that seeks to overcome culturally and ontologically blind and dehumanised knowledge generation reminiscent of impact assessment (Kabutaulaka, 2015; Sanga et al., 2018). We note similarities with

Pascoe et al. (2019) PNG work which uses 'storying' to capture Indigenous stories that challenge and compliment western conceptions of climate science.

Aware that *tok stori*<sup>22</sup> was developed alongside and shaped by the very forces of cultural hegemony that we sought to understand and/or sidestep, we sought a more emancipatory approach. Here we were influenced by our own experiences in PNG and by the interaction of Westernised extractive industries with local and/or Indigenous communities who possess their own ontologies. To be brief, the re-emergence of old cosmologies and non-Western paradigms in the global South (i.e. *samak kawsay*, *ubuntu* and *ecological swaraj*) has demonstrated the validity and necessity of valuing and using other ontologies to understand and overcome the challenges of our unsustainable existence and allow all beings to flourish (Kothari et al., 2014; Roche et al., 2019a; Solón, 2018). Within these ontologies we found shared elements in PNG, with Sanga et al. (2018) describing *tok stori* as a language of resistance. We wholeheartedly agreed, and encouraged by our conversation with Mary-Rose and Rita, wanted to further develop *tok stori* as a guiding methodology for our research engagement with communities in the Watut River Valley.

After much deliberation, we devised and adopted the *tok stori-tok ples* methodology,<sup>23</sup> an extension of *tok stori* where co-researchers were asked to think and talk among themselves in their own language; one of approximately 850 in PNG that are described in *Tok Pisin* as *tok ples*. The aim was to focus attention using the villagers' own language, and thereby remove the barriers imposed by seeing and describing values imposed by languages with different ontological and epistemological foundations. This encouraged our community co-researchers to connect

<sup>19</sup> The term *Papuan* was identified by PNG contributors as appropriate and emancipatory.

<sup>20</sup> Initially the research was based on a *yarning* approach, perhaps most succinctly described as an Indigenous Australian cousin to the Pacific *tok stori* (see Roche et al., 2019a).

<sup>21</sup> It is also apparent that using *tok stori*, like other well-intentioned approaches, could be co-opted by other stakeholders or used to capture exclusionary consultation and decision-making practices perverting the ethics behind the intent (Balaton-Chrimes and Stead, 2017; Coulthard, 2014).

<sup>22</sup> We thank an anonymous reviewer for questioning our use of the term 'tok stori', noting that our application of *tok stori* responds to academic methodologies, whereas in community just 'stori' would suffice. We agree and see this as an ironic mirroring of the very processes of western dominance that our methodology set out to overcome.

<sup>23</sup> While we found no record of such an approach, it is likely to have been used given the significant amount of multi-lingual research in PNG. Obviously longer-term and ethnographic studies would have the advantage of greater knowledge and fluency in the local *tok ples*.



with their culture and values that are often unseen, or rendered invisible by outsiders. We sought to actively encourage community co-researchers to deliberately think in their own language rather than just to obtain a translation of responses to questions or conversations guided by another ontology. Our intention was to enable and facilitate multi-lingual co-research that was decolonial and emancipatory, supporting independence rather than being designed and/or enacted in ways that constrained (Smith, 2012).

To implement *tok stori-tok ples* we started with a time respectful approach, where authors travelled to meet with groups where they were, which was often along the River washing, chatting and panning for gold. When researching along the River, one, two or three PNG<sup>24</sup> co-authors<sup>25</sup> walked along the riverbank, making contact with whoever was there at the time. After initial chats, sometimes assisted by the customary sharing of *buai*, the conversation followed the *tok stori-tok ples* approach. Apart from a deliberate seeking out of women to overcome gender based marginalisation, the encounters were random with participants choosing whether to cease or modify their activities and participate. Reminiscent of Cornwall (2018), we also used visual methods to uncover stories, where after being provided with drawing materials the community artists would leave to draw in private, before returning to discuss the images with Eugene. Some co-researchers contributed both written and illustrated stories while others just used one format. Fig. 2 depicts one riverside *tok stori*, with Eugene capturing women sharing stories with Nawasio at the River.

Reflecting Melanesian adaptability, our methodology morphed in application, with a residual positive effect from our earlier recognition, valuing and respect for their stories and *Ples* (village, community) obviating the need for a more structured approach in the later fieldwork visits. This was reinforced by the team's T-shirts, which said *Tok Stori / Tok Ples* on the front and *Stori bilong Mi* (story belong me), *Graun bilong Mi* (Ground belong me) on the back. The T-shirts, which were given to about thirty co-researchers, were a visible and tangible demonstration of our awareness of and respect for local and Indigenous<sup>26</sup> knowledge, ways of being and the specific research contributions made by individuals from Venembeli.

Again, there was purposeful intent in our research; as informed by previous engagements, we regarded many community stories as unheard. Critical stories of relations that are invisible to the neoliberal procedures that dominate impact assessment (Bond et al., 2020); a blindness that becomes permanent through the biased and constrained presentation of reality in impact assessment documentation. In particular, we suspected that the Wafi River, which enables and provides for so many visible activities, was also the site of significant less-visible interactions that are vital to social organisation in the village; that in addition to practical tasks, physical sustenance and a source of *gutpla sindaun*<sup>27</sup> (human flourishing), the Wafi River is also a site where relationships with each other and the land and water are maintained. Furthermore, it appeared that these relational qualities were ignored or unseen by the mining proponents, and consequently, undervalued by the communities as they became enamoured by the benefits that mining money could bring. In the process, vital components of life that ensure

*gutpla sindaun* were rendered invisible, ignored or not adequately valued.

Following the drafting of this article based on the 2019 fieldwork, stories from it were discussed with the Venembeli community when the fieldworkers returned in early 2020. The article was subsequently modified, with new information and stories added and clarifications and corrections made. Like our earlier research, the article will be made available in its full journal form and, in a combined English and Tok Pisin summary (a de-academised version), and it will be presented and discussed with the community following publication.

Finally, we see this collection of voices as an example of social mapping, not just of land ownership or use, but of interactions and relations across space and time. Indeed, the exercise utilised here follows a specific land use mapping activity in 2016, where despite intending and being prepared for implementing a digital GIS methodology, we turned to analogue techniques in the field. While hand drawn maps and stories proved to be a better method of engagement, the methodological change also recognised the risk that digital maps could be inappropriately used as evidence of land use. This could easily create tension and conflict between fluid and overlapping land claims. In this way, our research recognises and responds to the notion of land use as socially complex, fluid, temporally continuous and "...dependent on the ecological integrity of regional ecosystems, not individual land-use sites (Joly et al., 2018, p. 339)." Therefore, rather than mapping (the specific, time-bound, isolated places and activities), we have used the voices of Venembeli as a narrative of the social complexity and engagement with the surrounding ecosystems.

#### 4. Stories of life from Venembeli

These vignettes are a sample of the social complexity of life in Venembeli and the distinctive role the River has in people's lives. There are also other stories away from the River, and as such, these stories should be read as an example of more widespread connections and relations rather than as outliers. Below, using the experiences of children, village courtship, the experiences of women and food, we tell of relationships, connections, sustenance and social recreation.

##### 4.1. *Pikininis* (children)

Venembeli children spend at least a part (several hours or more) of every day playing in and adjacent to the Wafi River. In PNG, children often have much more freedom and independence than is conceivable in the industrial cities of the metropole (Connell, 2007). Think of long walks, young children imitating their parents and skilfully using large bush-knives, free to climb high trees for coconuts or play for hours, away from the direct gaze of parents. In Venembeli, we witnessed small groups of 3–6, or in larger swarms of 10+ children playing in the waters of the River, along its banks and in the Village. The children play — *inter alia* — a seemingly universal game of diving for treasure, in this case for a white stone that stands out from the otherwise washed smooth grey river stones. Fig 3. depicts two children at play in the River, along with the motion and joy captured by Eugene, the image evokes the sounds of water, joyful shrieks of children, the hum of the forest and the smell of cool freshwater on a hot day.

At other times children played land-based games on the River flats with balls, sticks and imaginary items and beings that adult researchers could fail to see. Marbles, a game played with small, toughened glass balls is widely and continuously played, with moving versions of the game as well as the usual universal circle, which attracted larger groups and spectators. The groups, while often dominated by older boys, included many girls and ranged in age from approximately 4–12 years.

<sup>24</sup> The sole non-PNG'ean researcher was deliberately excluded from these *tok stori-tok ples* discussions as his presence (including gender, skin colour and perceived knowledge/cultural authority) was deemed to be a distraction from hearing local voices and stories.

<sup>25</sup> No named co-authors are from Venembeli, Nawasio is from Morobe while Howard and Eugene resettled in Morobe from the Madang and Milne Bay Provinces.

<sup>26</sup> Although the communities do not readily identify as Indigenous [identifying locally (*ples*), as well as Melanesian, Papuan and Papua New Guinean, apart from self-identification, they satisfy any criteria for indigeneity so we use the term indigenous knowledge to situate their work in international conversations.

<sup>27</sup> See Roche et al. (2019b)



Fig 3. Piginini's playing in the River.

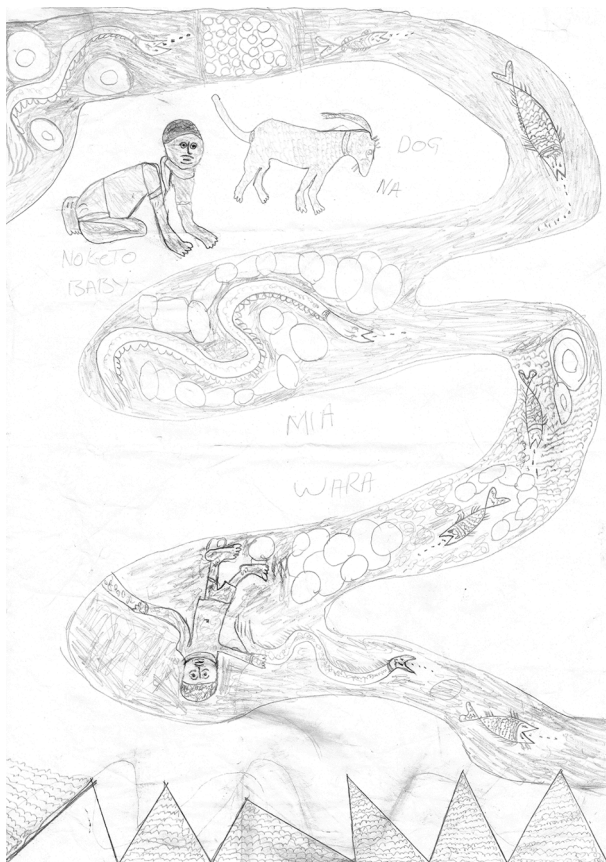


Fig 4. Complex river relationships.

As they grew older, children played less by the River, though they could be seen assisting the women with washing, gardening and cooking or undertaking their own alluvial mining activities from an early age.

From what we observed,<sup>28</sup> the River performs many valuable functions for children, not limited to a site of free and imaginative play, unsupervised time, washing and swimming, and teaching each other how to obtain their own bush foods. In addition, the River also acts as an

<sup>28</sup> Rather than converse with the children in organised meetings, we chose to observe their behaviour in informal settings, such as when swimming in the river, playing games, helping parents.

entertainer, babysitter and teacher, giving time and space for the parents to undertake daily tasks (gardens, mining, community), care for smaller children or to find time to themselves. While group relationships are not always harmonious, acts of care are common amongst the children, such as helping a younger child reach a favoured spot on the opposite riverbank, or helping them crush open the *garlip* nuts with rocks. This time spent together is vital in the formation of oneself in today's relationships and in the relationships that would come to form the basis for village relations in the future. The relationships between people and the River are captured in Fig 4., which shows a complex river life that imbues the quotidian routines of the Village; people are a part of, not apart from, the River.

#### 4.2. *Taim blong bung na stori* (courtship)

This next *stori* surprised us, as despite earlier visits over five years, we had not been privy to this particular story, which captures the importance of the River for gender relations in Venembeli. But while the *stori* is a positive one illustrating daily life, complex relations and connectivity, it first requires an understanding of the customary gendered relations in a PNG village to appreciate the way the River flows through village life and reproduction.

The typical gendered divisions in semi-subsistence communities in PNG are apparent in daily life, where women and girls are responsible for: cleaning of dishes, clothes, houses and young bodies; firewood collection and cooking; water carrying; child rearing and the bulk of the day-to-day work in the gardens. Separation by gender is evident in daily conversations, at church services and in activities during free time - though familial relations often cross these gendered boundaries. These gendered roles and separation are indicative of the wider situation in PNG, which has a record of gendered inequality and violence (Macintyre and Spark, 2017). The nature of gendered relations is observable in towns and remote villages alike and readily apparent in PNG Facebook conversations that often document domestic abuse and promote the submission of women to their husbands (first author's own experience).

During 2019 we heard stories of the River as a site of flirtation, away from the fixed and dominant gender divisions in the village. Young women and men would mix freely away from the observation of parents and village or church leaders. We learnt that the River is a site of personal exploration where future marital and other relationships are formed or strengthened, constituting a vital part of village relations and reproduction. In this way, the River becomes a kind of liminal space (Turner, 1969; van Gennep, 1960) where a spatial transformation of the customary gender norms occurs; a space where young women and men flirt and explore relationships. In this case, the behaviours and social relations that occur at the River (the liminal space) are distinct from the



Fig 5. Flirting.



Fig 6. River romance.

gendered norms adhered to in the Village (the non-liminal site). During our *tok stori-tok ples* conversations, women shared stories of these encounters and ‘boyfriends’ from the past to much communal laughter. Multiple storytellers told how women would splash the water, creating sounds that attracted the young men, who often shared gifts such as fish or *buai*, either given directly or through intermediaries such as younger siblings (See Fig 5.). One co-researcher explained the “*river is a place where men and women start their friendship*”. Perhaps just as importantly, the River enables youth to choose their own prospective partners rather than the more traditional approach where parents guide or organise marriages. Eugene captured some of the encounters shared with us, such as in the composite image of Fig 6, which depicts three scenes, including an in-river encounter and a young couple walking back to the Village.

In early 2020, when we revisited the stories with community members, an even deeper story emerged. Where previously the River was described as a meeting place, we now heard that it was also the site, or formation of, otherwise illicit (by community standards) relationships that could result in pregnancy and sometimes marriage. The stories

became more complex and varied with some involving sex at the River and other late-night couplings, some arranged by torchlight flash signals beckoning lovers to the bush (see Fig 6.). The stories indicated a willingness of the youth to flout village rules on courtship and sex, violating social norms and spurning traditional beliefs about the danger to one’s physical health of having sex in the bush. This generational contest over courting, marriage and sex is hardly new or unique to Venembeli, but rather indicates a more common experience with cultural change driven by exposure to outside ideas, values and customs.

While we appreciated the story’s new complexity and the resistance and romance of the non-sanctioned relationships, our initial point of interest remained; the River was a vital site for the formation of relationships and the reproduction of the community. Initially what prompted our interest was that none of the possible sites for resettlement of the Venembeli community were adjacent to a River like the Wafi. Instead, sites were remote from water sources or only had access to small streams. Our concern and research focus on the importance of the River, uncovered in this and other stories, was that the complex relations



between individuals in direct relation with the River and its environs, the Village and indeed the future – remained unseen and unvalued.

#### 4.3. Meri (women) of Venembeli and the big river

*I feel very strong and am filled with happiness when I stay in the River, and I also see this River is like a mother to me.*

While male speakers dominate mixed community gatherings, when asked, the women of Venembeli were keen to share stories about their daily reality. Some stories were practical accounts of what the River provided, such as protein and fish. Others, like the quote above, were more existential, describing feelings, emotions and human-environmental relationships. Below, the co-researcher commences by identifying the existential before listing nine important attributes that the Wafi River provides to their community, some of which relate to alluvial mining as the main source of funds for women.

*As a woman in Venembeli Village I am really very happy about this big river, which is very important to us as it really helps all our livelihood and our body.*

- 1 *Buying roofing iron and materials for building house*
- 2 *Buying food for family*
- 3 *Buying clothes for family*
- 4 *Catching fish, eels and prawns for protein (Fig. 7)*
- 5 *It is also like medicine to us*
- 6 *[A place where] we meet and tell stories, wash and feeling happy and strong*
- 7 *Has a secret place*
- 8 *Meeting place for man (man) and meri (woman) to meet and get married, and also for telling stories*
- 9 *Help the church and the government when they ask for support for money*<sup>29</sup>

Later she expanded, demonstrating a strong focus on access to river water and as a gift from God where the River was a blessing for the women of Venembeli, saying “(I)n our tok stori today I can see clearly that we women of Venembeli Village and the big river has made our life very easy. We didn’t need to walk far away to find water like women in other places. Thank you for God that he put us in this place and made it so special.”

The practical list above was a shared one, with many female co-researchers identifying similar points, sometimes during the same tok stori, but also in other conversations and across our numerous visits to the community. Other practical River activities and uses include traditional cooking, source of medicine (including surrounding environs), money for school fees, kitchen utensils, buai and spark (smokes or cigarettes).

Some of these were captured by another co-researcher when she told us,

*This big River we still use it the same as our ancestors used to use it. For us women the River is a special place for us to come together; sharing ideas, meeting boyfriends, washing clothes, blocking the River to catch fish, using traditional ways like cook food with mambo [bamboo] and underground with stone and also work for gold in the River.*

Another had a very practical list saying “(T)his river each day it give me gold and every day I have money to buy what my family and I need, like salt, sugar, tea and coffee, cooking oil, rice, soap, flour, clothes, school fees, protein, buai and smoke, pots and plate.”

It is, however, the existential, and non-physical aspects of living with the River that often remains unseen. While it might be possible for an



Fig. 7. Fishing with traditional net.

impact assessment to count the value of alluvial gold or the number of fish caught (see Fig 8.); we asked our co-researchers to tok stori about what the River means to women in terms of their own lives? The women shared their personal insights with us:

*This river is like medicine to me and my family. When we get sick we go swim and recover.*

*[After gardening] I hurry to the River and wash away all the dirt and sweat on me.*

*When I am sick I go wash in Wafi River and feel my illness is gone.*

*The River it stay in the past with our ancestor until today in our generation. Our ancestor use this big River for drinking, cooking, swimming, catching fish, (and) respecting the river’s secret place.*

*The River is a big strong and power over the land. It’s like my mother and help part of my life also. I really see that I am connected to the River with everything in my life.*

These quotes pictured and imagined in relation to village life make it possible to see how relations with each other and the River are more than a simple list of environmental services.

The River nurtures the women of Venembeli but it also helps them achieve independence. As alluded to above (Section 4.2) the gendered nature of relationships in PNG can make women more vulnerable. After hearing for many years about the importance of gold to meet daily needs and other expenses (school, health, transport), tok stori-tok ples elicited truths about alluvial gold mining as a source of independence for women of Venembeli. In particular, we heard how alluvial gold was important for women’s independence as a critical source of funds, especially for single mothers, widows and women whose husbands did not support them adequately. The River was described by one co-researcher as a kind of automatic teller machine<sup>30</sup> where they can pan for alluvial gold to fund expenses as they arise, “The River is also like a bank to use, from our ancestors until today with us and our children.”

This emancipatory role of the River for vulnerable women needs

<sup>29</sup> Our translations reflect the grammar and informality of the tok stori sessions.

<sup>30</sup> A perspective and term we had heard before in villages along the Watut River Valley (Boylan, 2014).



Fig 8. Woman fishing.

further investigation, both to properly value the complexity of social functions served by the River and also to understand and justly manage impacts on women arising from the mine and its attendant resettlement process. Village relationships were of course heterogenous in nature, some relationships were more equal than others with some women telling stories of working together with their husbands in the garden and gold mining. It is undeniably clear that quotidian relations with the River and its surrounds, just like human relations, are gendered, complex, multifaceted and individual. They require nuanced, culturally sensitive and ontologically accepting eyes and ears if they are to be seen and heard.

#### 4.4. *Kaikai* - Local food, local culture

Demonstrating the complexity of human/environment interactions and a desire to be heard, recorded and known, once asked to engage in *tok stori-tok ples*, co-researchers were keen for us to learn and record their language. This marked a change, where previously, conversations were held in English or *Tok Pisin* with just a few local words taught to the non-PNG researcher, such as *potok niva*, *sukui niva*, *bukin niva* (good morning, afternoon, evening); much to the general amusement of those around when the terms were either used and/or mispronounced. Conceivably this reaction was due to the novelty of outsiders engaging with their language, and through it with their local knowledge systems or perhaps it reflects a universal desire to be heard. From our observations, both factors were relevant; there was an evident need to be heard,

valued and respected in the process of research that was apparent in the vigour and enthusiasm with which participants contributed as community co-researchers.

The food lists below (Table 1) identify some of the *gaden* (garden) and *bus* (bush – the surrounding environment) foods eaten in the Village,<sup>31</sup> a process that started with identifying *Tok Ples* foods and then the identification of the corresponding *Tok Pisin* and finally English words. The draft lists were first compiled and recorded in 2019 and enthusiastically checked, corrected and added to in the field visit in 2020 during group-based, open-air activities. As made clear by our community co-researchers, there are many more garden and bush foods than those identified here, but these lists of forty garden and bush foods provide a means of illustrating the richness, dependence and strength of physical and cultural connections that the people of Venembeli have on and with the local environment. Evident from the lists is a degree of specialised knowledge, such as the yams *gembra* and *gora*, the second of which is softer and identified as better for old people and babies. Foods more recently introduced into the garden provide evidence of adaptation, such as the *tamato* with the identifiably English spelling and the introduced taro *garam*. Bush foods are much in demand as a protein source and are known as *abus* in *Tok Pisin*, literally translated as protein. These range from the more exotic *bus*, such as *gii* (beetles) and *busip* (cat), to the more frequent favourite of *weyambe* (eel), caught in abundance from the River and smoked while we stayed in the Village.

*Miyo* (*Tok Pisin-Marita*, English-Pandanus) is a good example of food that is more than sustenance; a celebrated food that fulfils not just the

<sup>31</sup> Bush and garden foods dominate the diet and are eaten alongside rice at most meals with tea, sugar and salt. Other store foods, such as noodles, tinned fish and dry biscuits are less regular treats.

**Table 1**  
Garden and Bush Foods eaten in Venembeli.

Bush Foods Tok Ples	Tok Pisin	English
Bik	bus poul	bushfowl
Bok	Pik	pig
Bu	mango buai	betelnut
Busip	Pusi	cat
buwemen	Kavivi	forest betelut
Croc	Mamut	bandicoot
Gee	Bintang	sago grapes
Gii	binating blg kapiak	beetles
gikya or gwimbe	Muruk	cassowary
giyamkesi	Tarangau	eagle
Gop	kuru mambu	bamboo shoot
Gwange	bikpla rat	huge rat
Huva	Bisin	bird
Imim	palang pis	grille fish
Karua	Karua	fish
Kasi	Kindam	prawns
Kokasi	Kapul	cuscus
Koo	Mumut	bandicoot
Kweler	Kakaruk	chicken
Kwemg	Koki	cocotoo
Lekum	Sikau	wallaby
Lewill	Palai	lizard
longenung	taun fruit	taun fruit
mamayi	swit gorgor	spicy gorgor
Mun	Rat	rat
Na	Dok	dog
Nagal	Kokomo	hornbill
nambina	Kolpis	fish
Nolan	kiau blg sako	green vegetable
nombong	Grasopa	grasshopper
ondumba	water frog	water frog
Oniola	mausgras pis	fish
Oop	bikpla karuka	nut
Sap	Cheeze	(nut) (NCE)
Seng	white wel fowl	bushfowl
tatapmun	liklik buai	jungle betelnut
Uwa	Pisin	bird
wagapam	Cuscus	cuscus
wanggolo	Gorgor	gorgor
wanglokomun	Gorgor	spicy gorgor
We	stonhet pis	fish
Wenfu	Frog	frog
weyambe	Malio	eel

Garden Foods Tok Ples	Tok Pisin	English
agakngalu	Tapiok	cassave
Ainian	Anian	onion
Akba	grin fen	green fern
Bin	Bin	bean
Bok	Pik	pig
Bua	bikpla pitpit	pitpit
Buu	Buai	betelnut
Cutema	kokomba	cucumber
Digong	Banana	cooking banana
Embe	longpla yam	long yam
Galip	Pinat	peanut
Garam	taro kongkong	taro (introduced)
Gemba	Yam	yam
Gora	Mamy	yam (smaller and softer)
guvava	Guvava	guvava
gwangnangu	Fern	fern
hecnau	Tapiok	cassava
huwanggu	Tulip	tulip (NCE)
Kaeli	Abika	aibica
katemanikwem	Melon	water melon
kawasung	Muli	lemon
keeting	sotpla pitpit	short pitpit
Kolak	Kakaruk	chicken
koluwa	Kaukau	sweet potato
koniola	wara kres	water crest
landis	brus kabis	cabbage
lembo	lombo	chilli

**Table 1 (continued)**

Garden Foods Tok Ples	Tok Pisin	English
Lia	kawawar	ginger
lipanga	grin fern	green fern
Milu	snek bin	snake bean
Miyo	Marita	pandanus
Neg	Greens	leafy green (NCE)
Negia	Mango	mango
Neya	Galip	garlip nut
ngiang	Taro	taro
nomungnongu	kumu mosong	fig leaves
panak	painapol	pineapple
pendi	Rais	rice
Pil	Bean	bean
pungen	Pumken	pumkin
sokom	Kon	corn
tamato	tamato	tomato
Wena	Aupa	(soft green veg) (NCE)
wongora	kokonas	coconut
wowi	kumu mosong	kumu mosong
Yaev	suga	sugar cane

NCE = no common equivalent.



**Fig. 9.** Miyo (pandanus).

function of improving flavour, but also marks a cultural event. On one visit, to prepare a pandanus meal as a special treat for the research team, a group of women and children walked to garden and bush to obtain food and the pandanus flowers, which were then collectively processed down by the River. That evening the pandanus sauce was used to improve the usual rice, *niyang* (taro) and *neg* (leafy green vegetables) meal for the visiting researchers. There were questions and evident curiosity regarding the team’s enjoyment and views on the local speciality, not just from those we shared the meal with, but other community members who knew that it was being prepared for us and those that had helped harvest and prepare the meal. At an earlier visit, the pandanus was one of the foods drawn (Fig 9.) by a co-researcher, alongside the *tok ples* and *tok pisin* words and an explanation that translates as, ‘sauce to flavour food’. There are five different types of *Miyo*, which grows in wet soils both in the Village and the bush, though generally people just refer to red or yellow varieties.

**5. Discussion**

*These stories and pictures you draw will not only tell our future generations, but inform the rest of the world that such places like Venembeli exist and has a land that is rich, diverse and abundant.*



The quote above was directed at the male youth (young men) of Venembeli by a man in his late twenties, exhorting them to value their identity and culture and to think about the welfare of future generations - but it applies equally well to our purposeful intent here. For, in identifying and responding to 'blindness', where unseen existences were overlooked and undervalued by mining companies, we have sought to share stories from Venembeli as it exists now, on the temporal precipice of industrial mining. Having been privileged to visit and live amongst the Venembeli community, we see in these stories glimpses of life, depicting complex relations between humans and the non-human that are essential to individual and collective human flourishing. Community stories which create a space where potential impacts and negative mining legacies can be seen and understood in relation to the life of a community. Stories that demand full recognition and respect for different ways of being and further challenge the flawed impact assessment systems in PNG (Mudd et al., 2020).

The four *tok stori* above cover various aspects of life in Venembeli: *Kaikai* from the *gaden* and *bus* of enormous variety that provides physical and cultural nourishment; *Taim blong bung na stori* as the means for transgressing traditional gendered social norms, individual freedom and the future of the Village; *Pikininis* who play and grow in the presence of the River, giving another meaning to the concept of River as Mother; and *Meri* who grow the food, raise the children and sustain the community, nurtured by the "big river". Within these stories we can see (or imagine) children playing, cultural feasts, environmental dependence, domestic chores and women's financial independence - all crucial moments of locally defined *gutpla sindaun* (human flourishing) (Roche et al., 2019). These stories of existence are part of Venembeli's story as it is now, existing alongside mineral exploration; offering a glimpse of life in Venembeli before mining and the inevitable dispossession, displacement<sup>32</sup> and fragmentation of a community. We contend that without further explication, these stories tell a truth about relational complexity and of the need to understand communities in their own locale, with their own values, ambitions and of ways of being. Impact assessments that fail to engage with local livelihoods and indigenous knowledge systems, continuing a negative legacy of colonialism and Western imperialism, that subjects people to alien ways and views without even the grace to see and value theirs.

As part of a deliberately emancipatory, decolonial and Melanesian approach, the adaptation of *tok stori* to *tok stori-tok ples* emerged as a means to hear and see village life. Prompted by the academy, challenged by *strongpla meri* (powerful women) and motivated by our co-researchers we needed a deliberately respectful engagement that could genuinely see another's knowledge; thereby acknowledging and valuing other ontological beliefs and formations. Designed and implemented by a PNG and Australian research team, we believe the methodology of *tok stori-tok ples* and the values implicit within were appropriate to unsettle taken-for-granted development orthodoxies, recognising that challenging the benefits of mining could generate disquiet (Cornwall, 2018). Though we note that our entangled relations and motivations also make it difficult to apply the concept of research rigour to this qualitative action-research, which by its nature is relational, situational and time specific (Stewart-Withers et al., 2014). Structured by design, in practice, when repeated at subsequent visits, our methodological approach gave way to a more organic, flexible engagement with the community leading us on our own process. An immanent adaptation of methodology where Papuan influences improved academic design. We regard their leadership and methodological improvements as a success.

As a purposefully emancipatory refinement of an existing

<sup>32</sup> See Roche et al. (2019a) for an application of de Wet's (2008) concept of displacement to Wafi-Golpu and PNG where the case is made that displacement more accurately captures the emotional impact of severed connections, compared to the frequently used, management focused and dispassionate term, resettlement.

methodology, we can see utility in further application of the methodology in PAR and impact assessment inside PNG and the Pacific, and in using the more general approach to understanding local ontologies elsewhere, a process that could equally be applied to other types of development. Such an approach could help address the constant tension between the quantitative and Western methods that dominate IA, and the qualitative and participatory approaches required to understand socially constructed impacts (Stewart-Withers et al., 2014). It also recognises the reality of assessing and understanding impacts from multiple paradigms and plural ontologies if we are to truly meet the goals of IA (Aledo-Tur and Dominguez-Gomez, 2017). More generally, we see this as a necessary step to correct settler-colonial IA processes where a lack of recognition erases relations and fails to recognise the complexity of connections between Indigenous Peoples and their land (Procter, 2020). We also contend that more needs to be done to understand the impacts of the 'presource curse' impacts that arrive in the period of waiting for development, in this case a period of forty years (Frynas and Buur, 2020). Further, this social mapping of complex and fluid relations can be understood as a variation of community based impact assessment (CBIA) recommended by Bice (2019). And while we deliberately focused on stories of existence rather than respond to specific impacts, this work extends the discursive space in impact assessment, where Indigenous knowledge and self-determination are valued (Lawrence and Larsen, 2017).

It is difficult to disentangle the approach of *tok stori-tok ples* from our ongoing and multi-year relationships and commitment, which provided the foundation for its deliberate application. Of many possible explanations we suspect that our intentional recognition of the importance of local knowledge clarified our previous engagements and relationships. Arguably, this increased the power of the community who then reciprocally returned our recognition of value and respect. It seems that by us respecting their knowledge and ways of being, it elevated their own knowledge and culture in their own minds. This idea was prompted through the process of sharing *tok stori*'s and feedback from the community;

*Your research team with Murdoch [University] helps us to see the good of our culture, traditional billum, medicine, ways of respect and share food, care for others.*

*Your team come and live with us and we learn from you many good information.*

*[The] Community realise you come here to help us think about the future. Our youths and everyone respect your work that is helpful to the people today and tomorrow.*

*Today in our tok stori I really see the importance of the river, it is not separate us human beings from the land. We all connect with water and land. Water or River has a very big role in our life as women.*

This is not to cast the research team as good, or powerful, but as mere practitioners who valued the local when the march of Western hegemony fails to acknowledge different ways of seeing or being in the world. In other words, our process was valued only because the usual processes are inadequate. In comparison, we ask whether the procedural blindness of the extractive industries is wilful, ontologically based or perhaps just a result of the banality of corporate structures and motivations (Balch and Armstrong, 2010). Regardless, the outcome is that corporate processes fail to see communities as they are. While we are unable to examine the ethics of agency within impact assessments here, the inability of individual agency to overcome procedural or structurally entrenched injustices and inequalities demands further attention; a discussion which we plan to contribute to in the future.

Finally, while these truncated stories cannot make life in Venembeli fully visible, their purpose will be served if they prompt the imagination and allow readers and stakeholders to see how lives need to be understood within their own context and ways of being. How could an outside



Fig 10. Venembeli II .

actor understand the importance of the Wafi River if they are unable to see the many connections and functions the River serves the Venembeli community, from courtship to education, child minding, an escape from the heat and a source of independence for women? What is certain, is that having participated in this research, the Venembeli community has a renewed awareness of the local sources of human flourishing. This awareness and valuation of the local faces significant pressure as the desire for development and modernity, combined with impact assessments that are underpinned by Western values, act to devalue the very sources of human flourishing that sustain the community; a fact further complicated by unrealistic expectations and the inability of extractive industries to deliver. Critical to understanding this is that while this mine (like Ramu Nickel) will bring development, the well-being of the community will still be overwhelmingly dependent on social connections and environmental goods, see Fig 10. (Leach, 2014). Further research efforts that explicitly values and embraces indigenous and local knowledge and ways of being will assist communities and other stakeholders to create positive legacies, with outcomes than enhance the human flourishing of communities, rather than negative mining legacies that erode *gupla sindaun*.

#### About

Authors note: Ms Nawasio Walim and Mr Howard Sindana live in the Morobe Province and have been and are engaged in a variety of roles and projects on development issues in Papua New Guinea. Mr Eugene

John is an artist, illustrator and teacher also based in the Morobe Province. Dr Rochelle Spencer is an Anthropologist at Murdoch University in Perth, Western Australia. Mr Charles Roche is also at Murdoch University having commenced academic research after many years of working with mining affected communities. This research has grown from needs identified from engagements with communities up and downstream of Wafi-Golpu since 2011.

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