Resource security in Papua New Guinea: Linking resources, development and security

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Introduction

The effects of Papua New Guinea's 40 years of natural resource dependence are ambiguous, contested and run deep. The minerals and petroleum sector has been the 'backbone' of the formal economy since Independence and dominates international trade and investment within the country, links numerous sectors such as finance, manufacturing and construction, makes up a significant proportion of GDP, has contributed significantly to government taxation, and is an important component of the skills development and skilled employment of the workforce. The extractives sector in Papua New Guinea has also created challenges that are consistent with many of the features of the so-called 'resource curse' or the belief that resource extraction often does not contribute to sustainable social and economic improvements in mineral resource dependent countries. Hence, there has been limited diversification away from mineral dependence since independence, and the high dependence on the extractive sector has produced a form of resource insecurity marked by reduced government capacity, rising corruption, and increased conflict, inequality and structural poverty.

In this context, a discussion of Papua New Guinea's extractive industries and the concept of 'resource security' is instructive, and provides a useful lens to more broadly examine the ways in which 'development' itself is represented in the country. In this context, resource security can most broadly be defined as ensuring that natural resources are abundant and available enough to prevent a lack or scarcity of water, food, energy or other basic elements of life. Without this resource security, a state of resource *insecurity* is produced, marked by shortages of water, food, or land, any of which can trigger drought, hunger, conflict, and poverty. Translating this notion of resource security to the Papua New Guinea extractives industry produces a two-fold distinction between resource security at the national level and a more local view of what resource security might mean. It is also apparent that the notion of security itself depends very much on the perspective adopted; resource security for a project developer means something different to that of a government official. At the local level, notions of security and insecurity also intersect with other critical development discourses such as rights, capabilities, vulnerability and resilience.

The term 'resource security' only makes sense in PNG, and is only useful as an explanatory concept, if we adopt it through the eye of the beholden. Overarching external analyses of PNG as a 'resource insecure state' (a parallel, cause or consequence of it being regarded as a 'weak state') need a sharper and at the same time more nuanced understanding of the ways in which communities (and the state) operate in terms of access to and the utility of natural resources in Papua New Guinea. In particular, acknowledging the importance of the relational worldview that dominates Melanesian lifeworlds becomes central to both understanding local concepts of resource security, and for developing policy and pathways forward.

Indications and representations of development in PNG

The UNDP National Human Development Report (NHDR) (UNDP 2014) provides both a snapshot of development indicators across a range of key sectors and a narrative that connects the extractive sector to these indicators. In basic terms, Papua New Guinea is now ranked 155th out of 189 countries in terms of its Human Development Index (HDI), with a score of 0.543, putting it at the top of the list of Low Human Development countries in the UNDP HDR (UNHDR) 'league table'. This is up two places from 2014 and the Index score itself has risen from 0.491 (2013). The World Bank though, continues to place Papua New Guinea in its Lower Middle Income category.

The disconnect between the Middle Income status and the Low Human Development rank points to the substantial value of resource exports (over K200bn since Independence) and significant economic flows through the government and the economy from the sector that have not translated into improvements in other broader-based aspects of development. Health and education indicators that contribute to the HDI alongside the economic measures have not been tracking upwards systematically. Some standard health measures have tracked positively – life expectancy at the national level in Papua New Guinea for example has officially increased from below 40 years in 1960, to over 64 years in 2017 (World Bank database). Other aspects and indicators of health have moved slower such as Maternal Mortality Rates (MMR) or even in some cases reversed, such as with tuberculosis numbers. Likewise, education indicators point to some improvements such as increased access to primary education over the past 20 years, but many remain very poor such as retention rates through the system, and an average level of formal education for adults in Papua New Guinea of just 3.9 years in 2012 (UNDP 2014:50). While the connections (and disconnections) are complex, this failure to turn resource wealth into broadly conceived social improvements sits behind much of the criticism of PNG's resource-dependent development to date.

The NHDR (UNDP 2014) also noted that:

> Poverty levels do not appear to have changed significantly since 1996, despite an economy that has grown at almost 6.5 per cent per annum over the past decade (p.3).

While measures of poverty in PNG have been contentious (see Gibson 2005; UNDP 2014, 28–31), there is no evidence that any form of poverty (basic-needs or food poverty, for example) has significantly reduced. And although there is no reliable measure of inequality (the most recent Gini coefficient calculations were done in 2009) the fact that there has been rising GNP/capita and national wealth without a linked drop in poverty rates indicates growing inequality, something that is also widely evidenced anecdotally.

There are two axes of inequality, in particular, that cut across any discussions of broad-based development in Papua New Guinea. First, there are stark differences between male and female indicators of development. The NHDR (2014:3) states:

> the very poor indicators relating to gender disparity and inequality, with women in Papua New Guinea having consistently lower education and heath indicators, and being subject to high levels of gender-based violence.

There are also significant differences in development and inequality by geographic location. There is a strong urban/rural divide across most indicators of development and provincial level indicators show:

> after the National Capital District (NCD), the five provinces that make up the Island region of Papua New Guinea (the provinces of Manus, New Ireland, East and West New Britain, and Bougainville) have higher levels of achievement of the MDGs (Millennium Development Goals) (and hence higher human development) than the rest of the country (along with Milne Bay) (p.57).

These various dimensions of inequality – none of which appear to be reducing – are in part a consequence of differing geographies, access, histories, and resources. Location of and access to different natural resources (land, forests, minerals, water etc) varies significantly for communities across the country. At the sub-national level this variation produces differing levels of resource security and insecurity.

In sum, natural resources and particularly the extractive industries in Papua New Guinea are a central element of PNG's development narrative. The NHDR illustrates how the effects of mining, oil and gas dominate the formal economy, and the lack of translation of mineral revenues into broad-based forms of development is regarded as one of the major failures in the country's development history.

Resource security at the national level

Many of the issues in PNG's extractives sector certainly speak to rising insecurities at national and local levels, but they tend to be framed as impacts, 'curses' and corporate responsibilities.

Resource security at the national level is discussed in two related but distinct ways, each of which is driven by different actors. The dominant 'resource security' discourse arises in relation to state regulation and *security of access* to mineral resources for multinational corporate investors. The NHDR noted that in 'Bohre Dolbear's 2013 version of its 'Ranking of Countries for Mining Investment, "Where Not to Invest", Papua New Guinea was ranked 22nd out of 25 countries on "managing social issues", "permitting delays" and corruption' (p.10). Multinational corporate investors rate 'resource security' in PNG poorly as they have concerns about securing continuing access to the mineral resource they are mining, along with contractual adherence by the State. While this has been a long-standing concern, recent events in relation to the Porgera gold mine have brought the issue to the fore again.

The refusal of the State to renew the Special Mining Lease (SML) for the corporate (Canadian and Chinese) owners of the Porgera mine has led to charges of expropriation and internationally-mediated legal action. The rationale provided for this action by the State was an inability to agree to terms for the renewal which would have delivered appropriate benefits to the State and local communities, a charge that the company disputed (Burton and Banks 2020). Although it does appear that a settlement may at least partially restore access of the investors to the operation, this reduced 'security' has occurred in the context of broader resource nationalism which itself seeks to 'secure' these mineral resources for the nation (NHDR 2014). Papua New Guinea's 'insecurity' is a result of political shifts and continuing *access* is the defining issue for both the investor and the state.

A second perspective on resource security would argue that while the security of the resources themselves is not threatened (except through exhaustion of the resource which at present seems distant), access to *revenues from these resources* is insecure. For example, the forestry sector has provided very low returns to the nation for decades due to transfer pricing and corruption. Neither the national government nor the majority of those in communities affected by the industry have secured significant sustainable returns from the sector as a result of poorly framed and enforced agreements.

The volatility of mineral revenue which is a result of a complex interaction between global commodity prices, corporate profitability and Mining and Petroleum fiscal regimes and agreement, also produces insecurity for the state. Recently, commodity price fluctuations, fiscal terms and revenue distribution agreements meant the returns to the national government from mining and petroleum during 2014–17 were at their lowest levels in 25 years despite export values being at record highs thanks to the initiation of the PNGLNG project (Banks and Namorong 2018). In most instances, the risks associated with this insecurity are borne heavily by the State.

'Abundance' and 'access' then play into understandings of security at the national level. This 'resource revenue insecurity' has very real developmental effects as it creates a lack of certainty that in turn constrains the ability of the State to plan for and commit to long-term national development programs and budget trajectories. This then makes the link between mineral resources and development planning *insecure* at the national level.

Insecurities at the local level

Mining and the extractive sector have a particularly poor record in terms of local impacts in Papua New Guinea, and these impacts are all closely associated with growing levels of insecurity.

The most obvious signs of extraction compromising security are the environmental and social effects experienced in the vicinity of the operations (and often some distance away). Mining in particular transforms landscapes and environments. Forests are removed, mountains razed and valleys filled through the construction and waste materials from mines. Waterways are typically polluted, often at levels that persist for hundreds of kilometres downstream. The Ok Tedi mine in Western province became emblematic of the effects of waste materials on river systems (see Banks and Ballard 1997), but similar destruction has been apparent in relation to Bougainville, Porgera and Wafi. Forests, agricultural land and fresh water supplies are all reduced in extent and quality. Access to such resources is likewise compromised – often severely – for local communities, and water, food and land security all come under increasing pressure. The NHDR (UNDP 2014:61-62) uses the Porgera mine to illustrate the relationship between poor social and environmental conditions and resource insecurity in surrounding communities which make deadly conflict highly likely. A recent study from Bougainville (Human Rights Law Centre 2020) showed that environmental legacies from these large-scale mines can impact resource access for communities for decades after the mine closes.

It is also clear that at the operational level, these threats to environmental security are entwined with social and economic processes that threaten human security. Increasing migration (Bainton and Banks 2018), growing inequalities, and the 'social pathologies' associated with mining (alcohol, gambling, prostitution, and other illegal activities) produce situations in these communities where human rights violations are common, where human capability development is reduced, and the threats to human security are numerous and sustained.

Growing insecurities in the community pose a threat to the security of the mine operation. Attacks on staff, equipment, vehicles and camps obviously affect continuing operations of the mines and oilfields. The response is the development of corporate security and the increasing presence of police and para-military state forces. Not surprisingly, this securitisation of the resource operations often feeds growing insecurities in the communities, with many of the recorded human rights violations at Porgera being committed by these private and state security forces (Human Rights Watch 2010). The responses to violence and insecurity often produce the conditions that generate more violence and insecurity around resource extraction sites.

It is also worth considering a more locally-focused community lens in these contexts. Every aspect of Melanesian life was defined by the relationships individuals constructed with other peoples and the environments they lived in including their connections to land, their place within societies, and even the very foundations of their own individual identity (Strathern 1988). Tightly bound relationships based on reciprocity, of dependency and of protection formed a central element of security for individuals and communities.

Relationships then form a critical and often understated axis for a locally-conceived notion of 'resource security', one that takes in elements of human security, human rights and human capability approaches within the Melanesian relationally-oriented worldview. To give one example, human rights abuses committed by an external party (recent migrants or a mining company security officer) may spark a collective response that can destabilise other relationships i.e. 'tribal fighting' at Porgera, regularly sparked by tensions over mine compensation and exacerbated by migrants, frequently become deadly and complex conflicts that compromised security for many within the community (Burton 2014, Jacka 2019).

At the local level, as with the national level, resource security can then take a number of forms, coming from differing but often intersecting perspectives on security, each of which necessitates us asking what is being secured, by whom, and from who? The paradoxical movement that sees some stakeholders seeking to securitise resources in ways that actually increase the likelihood that others will face growing security threats is an outcome of these conflicting understandings of the origins and motivations that generate security and insecurity.

Conclusions

Natural resources and their exploitation and/or conservation are central to most of the development narratives narrated in, by, and about Papua New Guinea. Analysing resource security can provide additional insights into these representations of development, and highlight some of the gaps and exclusions within these existing representations and narratives.

At the national scale, there are tensions between a global sector that places a premium on stability and security (or continuity of access to resources and leases), and a nation-state concerned with securing consistent flows of revenue from extractive industries to be able to consistently and predictably fund broad-based development. These narratives meet at the negotiating table, when mining agreements and fiscal terms are settled. Recent history in Papua New Guinea suggests that neither multinational corporations nor the nation-state are satisfied with existing arrangements as leases continue to be contested, and fluctuations in resource revenues continue to be a constraint on more effective service delivery and development.

At local levels, resource security is compromised by growing inequalities, environmental destruction, and conflict within communities and between communities, the State, and resource developers. Resource insecurity drives multidimensional forms of poverty, where people and communities are subjected to growing social and economic insecurity. And paradoxically, it appears that the more corporations invest in securitising their operations, the greater the security risks to those operations as community insecurity increases and conflicts intensify. Critically, for Melanesian communities, relational values are central to how

security and development is understood, meaning that discussions of resource security at local levels should account for the ways in which Melanesian peoples frame their livelihoods and communities around kinship, reciprocity, dependency and relational constructions of identity.

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