PACIFIC CHOICE

From Dependency to Sustainability

Asian Development Bank
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A Case Study on the Economic Capacity Development of the Ok Tedi Mine-area Community

by Paulina Siop*

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Asian Development Bank
Capacity Development Series

This sub-series is published by the Asian Development Bank to provide the governments of its Pacific developing member countries (PDMCs) with analyses and insights on key issues and lessons learned with respect to capacity development. Cases studied highlight a range of experiences throughout the region by sector, theme and source of external support, revealing approaches to capacity development that work best and the conditions that have been conducive to their success. They also explore the unique challenges faced by PDMCs in addressing capacity constraints as well as some of the opportunities facing governments and the people in the Pacific islands. Among other things, the case studies underline the importance of PDMC leadership, engagement of local partners, strategic attention to long-term capacity issues and effective use of external resources. It is our hope that the findings in these reports will help to guide future capacity building efforts in the Pacific.

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Despite 50 years of aid in the Pacific region, including some S$17 billion invested over the past 25 years, overall results in terms of sustainable improvements in capacity have been mixed, at best. This raises questions, not only in the Pacific but also throughout the developing world, about approaches to capacity development—what works, what doesn’t, and why? The Asian Development Bank (ADB) recognizes the importance of capacity development, having officially embraced it as a thematic priority in 2004. ADB’s commitment is consistent with the Paris Declaration on Aid Effectiveness and the Pacific Principles on Aid Effectiveness. The programs of a number of other funding agencies, including the Australian Agency for International Development (AusAID), New Zealand’s Agency for International Development (NZAID), United Nations Development Programme (UNDP), and the World Bank also embrace the importance of more effective capacity development.

Increased interest in capacity development in recent years reflects an acknowledgment of the shortcomings in development assistance over the past 50 years. This has led to calls for approaches that are more systematic and integrated, and which focus more on developing country ownership and achievement of sustainable results. Capacity amounts to the policy, procedures, personnel, organizations, institutions, and supporting environment required to effectively deliver development outcomes. In particular, ADB has focused on the ability of public sector capacity to deliver essential services, thereby strengthening the compact between government, civil society, and the private sector. Capacity development is much more than just training or skills transfer. It is really about effective organizations and institutions, a sound unpoliticized policy environment, accountability systems, effective relationships, and appropriate incentives. And as noted in this study, capacity development should be firmly rooted in a country’s political economy.

To gain a better understanding of what works in terms of approaches to capacity development, ADB’s Pacific Department (PARD) commissioned a regional study in 2007. The study was rooted in 20 case studies from 11 countries across the region, prepared mainly by Pacific islands consultants. The case studies covered a range of programming experiences—from economic planning, to infrastructure development, health and legal sector reform, and civil society enhancement, as well as different modalities for supporting capacity development. ADB’s intent in commissioning the overall study was to draw upon the individual findings and recommendations to help guide future capacity building efforts in the Pacific, including institutionalizing a more focused and effective approach to capacity development in ADB’s country programs and operations.
The case studies in this series and the overall study report are the result of collaboration among a number of consultants working with ADB under the direction of Steve Pollard, Principal Economist, PARD. The team leader for the overall study was Joe Bolger, and the authors of the studies were Helio Augusto, Kevin Balm, Brian Bell, Ron Duncan, Ben Graham, Ueantabo Mackenzie, James McMaster, Samson Rihuoha, Cedric Saldanha, Tom Seta, Paulina Siop, Esokia Solofa, Kaveinga Tu’itahi, Henry Vira, and Vaine Wickman. The study also benefited from the input of a number of resource persons, including Tony Hughes (Solomon Islands), Lynn Pieper (Timor-Leste), Tim O’Meara (Samoa), and Patricia Lyon, Senior Capacity Development Specialist, AusAID. The case studies represent the situation at the time of writing in 2007.

In conclusion, this report seeks to enhance understanding and dialogue on capacity development and its potential for contributing to poverty reduction and improvements in the quality of life of all Pacific islanders. I trust that you will find it both thought-provoking and practically helpful in advancing our collective commitment to development in the Pacific.

Philip Erquiaga
Director General
Pacific Department
The Pacific Choice
**Papua New Guinea Facts**

<table>
<thead>
<tr>
<th>Category</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>5.7 M (estimated)</td>
</tr>
<tr>
<td>Political status</td>
<td>Constitutional parliamentary democracy. PNG has been fully independent since September 16, 1975 and became the 142nd member of the United Nations in October, 1975. It is also a member of the British Commonwealth.</td>
</tr>
<tr>
<td>Capital</td>
<td>Port Moresby</td>
</tr>
<tr>
<td>Location</td>
<td>the eastern half of the island of New Guinea, 160 kilometres north of Australia.</td>
</tr>
<tr>
<td>Languages</td>
<td>More than 800 distinct languages. Melanesian Pidgin and Hiri Motu are the two most widely used, but English is the official language in education, businesses and government circles.</td>
</tr>
<tr>
<td>Per capita GDP</td>
<td>U.S. $903 (2006)</td>
</tr>
<tr>
<td>Life expectancy</td>
<td>55 years</td>
</tr>
<tr>
<td>Adult literacy</td>
<td>57%</td>
</tr>
</tbody>
</table>

Sources: GoPNG web site, PNG Tourism Promotion Authority, Papua New Guinea Business and Street Directory, US Department of State
BACKGROUND

“People helping people to build skills to change their own future.... ”

Western Province of Papua New Guinea (PNG) is isolated and sparsely populated, with large expanses of undeveloped land, few economic development activities, and urban centers that are scattered throughout the province. The province is home to the Ok Tedi Copper Mine,\(^1\) which is located in the mountainous headwaters of the Ok Tedi River, a tributary of the Fly River. The mine is operated by Ok Tedi Mining Limited (OTML), with headquarters at Tabubil, the mining township. The mine began operations in 1984, initially with gold production that was later replaced by large-scale open pit copper mining.

Since commencement, the Ok Tedi mine has contributed immensely to the national economy,\(^3\) providing in excess of K1.4 billion\(^4\) in direct financial benefits to PNG. These include taxes, duties and fees, royalties, dividends to the national government, compensation payments, cost of road construction and maintenance, employment and training costs for national staff, cost of community projects, and donations.

Major contributions of Ok Tedi mine include

- K110 million in various compensation payments and other community benefits to mine-area landowners;

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2 Prior to 2001 the Ok Tedi Mine was owned by BHP-Billiton (52%), the Government of Papua New Guinea (PNG) (30%), and Inmet Mining Ltd (18%). The controversy surrounding the environmental impact of the mine resulted in the withdrawal of BHP-Billiton and its shares were transferred to PNG Sustainable Development Program Limited (PNG SDPL), a company created purposely to inherit BHP-Billiton’s 52% shareholding with a charter to invest in sustainable development projects in PNG, especially Western Province.
3 The Ok Tedi Mine accounts for around 25% of PNG’s exports and it is one of the country’s most important sources of foreign exchange earnings (A$917 million in 2004). It currently contributes 10% of the PNG gross domestic product.
4 The kina is Papua New Guinea’s currency. K1.0 = USS 0.38704 (June, 2008)
Figure 1. Map of Mining Sites in PNG, including Ok Tedi
• construction of the Kiunga-Tabubil road on behalf of the state-owned company ROADCO and a further K48 million spent on road maintenance;
• user fees of K120 million paid to the state;
• 1,700 PNG staff employed directly (on average since 1985), representing 86% of total mine employees; the mine has also employed 600 staff as apprentices and provided training or education for over 3,000 people (at an estimated cost of over K22 million);
• construction of various community projects in addition to those included in compensation payments (equal to K10 million);
• K429 million to the national government in taxes and duties, K98 million in production royalties, and K95 million in dividends;\(^5\) and
• help establish over 70 local businesses, indirect employment opportunities for more than 1,000 staff employed by subcontractors and another 1,000 staff employed in local businesses dependent on the mine.\(^6\)

The trade-off for these benefits has been the environmental impact of the mine. On average, 80 million tons of tailings and overburden are discharged into the Ok Tedi River annually. Sediment build-up downstream has displaced the river; consequently the environment and people are affected. More recent problems include forest dieback and acid rock drainage resulting in vast areas being left devoid of vegetation. The Ok Tedi Mine has continued all these years as a compromise between the environmental and economic priorities of different stakeholders. Nevertheless, the Ok Tedi Mining Limited (OTML) board decided in 2001 to close the mine by 2012.

Soon after this decision was reached, the mine closure planning process was set in motion, involving the Government, OTML, affected communities, and other key stakeholders. This case study is set against the backdrop of the mine closure planning process. It focuses, in particular, on the economic capacity

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\(^5\) These dividend payments include the shares allocated to the Western Provincial Government, and Mine-area Community and Preference Dividends paid during 1991–1994.

\(^6\) Ok Tedi Mining Limited. 2002. *Ok Tedi Social and Economic Impact Report*. Tabubil, PNG.
development challenges of the mine area community as it has sought to enhance prospects for sustainable development beyond mine closure.

Ok Tedi Mine-Area Community

Prior to mining, the Ok Tedi Mine site was completely uninhabited. Two groups of people lived in the surrounding area—the Wopkamins to the north and the Upper Awins to the south—with a combined population of approximately 800. These people had almost no exposure to the outside world; their life expectancy was 25–30 years and about three quarters of the children suffered from malaria. The physical environment was harsh with dramatic landscapes of limestone mountains, steep ravines, and one of the highest levels of rainfall (8,000 millimeters per year) in the world. These were some of the factors that contributed to the people’s isolation and low standard of living.

The small communities surrounding the mine area came to be recognized as the landowners of the mine and are generally referred to as the mine-area community. The community is comprised of 10 villages—six Wopkamin and four Upper Awin. Within the Wopkamin area, four villages were regarded as the principal landowners because they lived within the Special Mining Lease area (SML). The other two Wopkamin villages own the land leased for mining purposes (LMP 1) for the development of support infrastructure, such as the Tabubil mining township and the Ok Menga power station. The four Upper Awin villages were classified as LMP 2 landowners because the mine tailings dam was to have been built on their land; however, it was abandoned due to unstable land conditions.

Since mining began, the population of the mine-area community has grown, and as of 2001 there was an estimated adult population of 2,596 as well as 3,000 children. Table 1 provides the population estimates for each mine-area village.
Mining has transformed the lives of the people in the mine-area from a traditional way of life to a more modern lifestyle. Modernization has come quickly and in many unexpected ways and it has been a huge challenge to cope with the changes. Most people seem to have accepted the changes and are moving forward with their lives, but they are now confronted with the impending mine closure, which brings another challenging angle to their story.

Roger Higgins, OTML managing director, said of the changes that were brought about in the lives of people as a result of mining:

The Ok Tedi copper mine is a story about how lives can be changed forever by western development, and the many lessons that can be learned from that. It is a story about how people respond to those changes and, the surprising range of challenges and opportunities that exist to make those changes acceptable and positive for a people who will never be able to go back to the way things used to be.\textsuperscript{7}

The changes brought on by mining resulted in the mine-area community, especially the SML and LMP 1 villages, enjoying a higher standard of living with the following benefits:

- Most families now live in permanent houses with modern amenities like electricity, water, and septic toilet.

\textsuperscript{7} Ok Tedi Mining Limited. 2000. \textit{Investing in the Future of Western Province}. Tabubil, PNG. November.
Each village has an aid post and has access to the Tabubil Hospital services.

About one third of the adult male population is employed by the mine. Initially, this was to provide unskilled labor, but over time the workers have become skilled through in-house training.

Education is accessible through the community schools and the local high schools, or at other private schools outside the province. People from the mine-area community are given preference over others if they wish to enroll at the Apprentice Training Centre provided by OTML.

Public services, such as banks, post office, travel agency, supermarkets, etc., provided in the mining township of Tabubil are accessible by the community.

Road and air transport access has been made available through public infrastructure built and maintained by OTML. All the villages except Atemkit and Kavorabip have road access to Tabubil.

Most families have more than two sources of income, e.g., royalties, compensation, dividends, wages, rent, etc.

In the process, residents of the mine-area community have become almost entirely dependent on the mine for their livelihoods, which makes them vulnerable to the impacts of mine closure. It is generally assumed that they will not be able to maintain their current lifestyle or continue to reap economic gains as they have during the life of the mine. Therefore, questions relating to capacities required to support some level of economic sustainability have become very critical for the community as the people living there look ahead.

**Sustainable Economic Development Issues**

In addition to developing an unhealthy dependence on the mine, other factors have combined to limit the ability of the community to address long-term economic prospects.

1. **Ad hoc management of economic opportunities.** Many mine-related economic opportunities have been squandered through lack of control and management under proper sustainable economic structures.
2. **No savings and investment culture.** After 20 years of receiving cash benefits from the mine, the community has very little to show in terms of private savings and/or investment. A negligible amount has been spent on sustainable investment activities. On average, less than 1% of Ok Tedi landowners’ total annual household expenditure was invested in agricultural activities and about 6% was invested in nonagricultural enterprises related to the mine\(^8\)—many of which, of course, are not likely to be sustainable given the planned closure.

3. **Leadership crisis.** The mine-area community has experienced a leadership crisis; the hierarchical leadership structure has not always performed in the best interests of the community with all the economic resources entrusted to them.

4. **Absence of alternative economic base.** The harsh environment and the remoteness of the area do not provide very much hope for developing an alternative economic base, including nonmining economic activities.

5. **Poor performance of local business investments.** In 2001, 72 local businesses were operating in the mine area. Fifty were 100% locally owned. Forty businesses provided contract services to the mine, while 32 were involved in spin-off business activities. Equity interests in these businesses were held by either individuals, families, clans, or the community as a whole. Most of the businesses had outside management control, either by nationals or expatriate managers. These businesses have performed dismally in terms of creating wealth for the community. Even the joint ventures have shown no real partnership spirit in their working arrangements with local partners.

I was the team leader of Business Development (BD) with OTML Community Affairs Department in 2001. I took charge of the local Business Development Program to assist landowners to benefit from mine-related business opportunities. In addition, I developed strategies for addressing economic sustainability

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issues of the local economy related to mine closure. I also assisted in representing OTML on socioeconomic impact matters with the PNG Government Mine Closure Planning Committee organized by the department of mining.

The lack of economic capacity of the mine-area community was identified as the most critical issue affecting it. Given the impending mine closure, a strategy had to be developed quickly to address this concern. It seemed late for such an intervention, but the view was that it was better late than never and the hope was that something could be salvaged for the community. As a result, the Mine-area Community Investment Program, an economic capacity development strategy, was developed and implemented. What follows is an account of this program.
MINE-AREA COMMUNITY INVESTMENT PROGRAM

Design and Development

The Mine-area Community Investment Program was designed to develop the economic capacity of the community. Capacity development was needed at different levels using different approaches, and it was recognized that it would require an enabling environment. The key components of the program included development of an investment structure, support for business development, community development initiatives, leadership strengthening (both community and business), and OTML management support.

The community and stakeholder consultations focused on "soft" issues—such as developing trust, understanding, and commitment—while the organizational development aspects addressed “hard” issues, including setting up the landowner companies and sourcing finance.

The objectives of the program components were as follows:

- **Organizational Structure Development**
  - to create an investment structure that would promote savings and investment by community groups and individuals;
  - to establish a representative umbrella company for the community that would take control of existing local business opportunities and take on other larger business opportunities now and in future;
  - to create an organization that would provide a vehicle to filter benefits from business and investment directly to individual families in the villages; and
  - to create a context in which other local business activities could be supported.
• Business Development
  ▪ to facilitate development of Star Mountain Investment Holding Ltd (SMIHL), the landowner umbrella company;
  ▪ to source financing for SMIHL business start-up;
  ▪ to facilitate business start-up processes for SMIHL;
  ▪ to facilitate development of clan companies as portfolio investment opportunities for the people; and
  ▪ to streamline current local businesses under SMIHL because there were too many small but unsustainable businesses demanding work from OTML.

• Mine-area Community
  ▪ to take ownership of the program;
  ▪ to support with financial allocations for the savings and investment exercise, and draw on their remaining financial benefits; and
  ▪ to take responsibility for their own economic empowerment.

• Leadership
  ▪ to understand the sustainable development issues confronting the community and respond positively to support the program;
  ▪ to promote the program in the community; and
  ▪ to accept some loss of power and control over the economic benefits.

• OTML
  ▪ to provide the enabling environment for the program to be successfully implemented and managed;
  ▪ to give due recognition to SMIHL as the true landowner company; and
  ▪ to provide support where necessary.

Investment Structure

A three-tier investment structure (Figure 2) was developed as the core of the program to provide the basis to develop the economic capacity of the mine-area community. It was designed to capture the inflow of cash benefits from individuals, clans, and local businesses and to redirect it to sustainable economic development activities. The three levels are also the entry
points for the current benefit streams going to the mine-area community:

**Level 1.** Level 1 comprises the community umbrella companies—SMIHL and Mineral Resources Star Mountain (MRSM). SMIHL is locally controlled while MRSM is controlled by Mineral Resources Development Company (MRDC) under the government equity arrangement in OTML. SMIHL, being locally controlled, is seen as the main commercial arm to harness and manage the current economic opportunities for further business and investment growth.

*Figure 2. Ok Tedi Mine-Area Community Investment Structure*

Level 2. The second level comprises the clan-based companies, which are designed purposely to link the investments with the people to filter cash and other benefits directly to individual members of the community. These companies are treated as investment portfolio companies; equity in existing local businesses held by the community is allocated to the respective
clan members under their clan companies. Effectively, the clan companies provide a level of investment to maximize future benefits for the community.

**Level 3.** Level 3 accommodates family initiatives (small and micro businesses). The activities are somewhat detached from those in levels 1 and 2 but are nevertheless recognized and supported, given the investment potential they have in this high cash-flow environment. Appropriate support is provided to encourage families to develop their own economic capacities to prepare for mine closure.

**Program Implementation**

A three-phased approach to program implementation was taken. First, a thorough community consultation and communication process was conducted with different community groups and OTML to solicit support for the program, but most importantly to effect change in the savings and investment decisions of the people.

The second phase involved the administrative inputs by the business development team. Mobilization of shareholding under the various companies of the investment structure was organized and registrations were formalized with the Government’s Investment Promotion Authority. Also, the equity interests of various clans and groups were streamlined and formalized under the investment portfolio companies.

The third phase involved the technical (business) inputs that were required to launch the start-up of the companies and associated activities. The program was implemented over 2 years, 2002 and 2003, by the business development team.

**Community Consultation and Communication**

Community consultation and communication were critical components of the program because the implementation of phases 2 and 3 were dependent on the acceptance and support of the community. The consultation and communication
approach was carefully planned to capture the interest of the leaders and members of the communities. This was especially crucial when there was no savings and investment culture in the community—combined with a general distrust of local business management. The community needed to have a sense of ownership of the program, but most importantly take proactive steps to change their savings and investment behavior. Questions about who could lead the community consultation effectively, what messages would help to garner community support and cooperation, and which community persons should be drawn in for support, helped to frame the process. The consultation process was designed to have a domino effect on the target groups: initially consult with key community leaders and get their support, and together consult with clan leaders and so forth until all the groups had been consulted.

**Key Messages for the Community**

It was difficult to explain economic capacity development to people in the community with very little education, so a *bilum* (string bag in Pidgin English) (Figure 3) analogy was used to present the key messages.

*Figure 3. Traditional Papua New Guinea String Bag (*bilum*)

The current mismanagement of economic opportunities undermining the future economic capacity of the community was discussed using the bilum analogy. The community was told
that "there were many holes in their benefits—bilum—so there was a need to patch up all the holes so food does not drop from the hole." In other words, people had been operating all this time with too many holes in their bilums, which had limited or drained away their economic capacity. The message, therefore, was that the holes in their benefits must be patched to strengthen their economic position and to secure their future.

The bilum analogy was again used for the three-tier investment structure. Community members were told that the three levels of investment in the program were like three different sized bilums—large, medium, and small. The large bilum is represented by SMIHL, the commercial vehicle. It is big enough to cater for the socioeconomic development needs of the community, such as education subsidies and the community health scheme. The medium-size bilum represents the clan portfolio companies that would distribute direct cash benefit dividends to the clan members, as well as other socioeconomic benefits. The small bilum was for family livelihoods, but was also to encourage private initiatives to save and invest for the future. Having three bilums to draw food from minimizes the risk of having one bilum only with many holes.

Consulting with Communities and Stakeholders

Meetings were held with various community groups and other stakeholders about the Mine-area Community Investment Program.

Community Leaders. It is common practice in PNG communities to accord leadership roles in resource projects to the principal landowning clan(s). At Ok Tedi, there was one principal landowner leader initially but a rival leader emerged later and the community accepted both as their leaders. These two leaders formed the top hierarchy of the leadership structure in the community and they led, albeit with much rivalry between them. Initially, these two leaders were persuaded to set aside their differences and come together to support the implementation of the program. A presentation about the program was made separately to each leader to solicit his support. Lesley Farimiap,
the OTML mine-area community relations officer, who comes from the same clan as the two leaders, assisted in reaching out to them to support the program.

The leaders were made aware of the potential consequences of being left with limited economic capacity at mine closure. Accordingly, they pledged their support for the program, seeing it as an innovative way of addressing many of the local business and investment issues they had been grappling with for a long time. According to Lesley, securing the consensus of the two leaders, as well as their support for the program, was a major breakthrough for the community. He admitted trying for several years to get them to work together to address important issues affecting the community. I was unaware that this was the beginning of their reconciliation process; when they began talking about the program in the community, they also began to communicate with each other. This was a significant but timely achievement for the community because their leaders could now be united in their resolve to address critical capacity issues affecting the community in the face of mine closure.

Clan Leaders. At Ok Tedi, mine-related cash benefits are paid to the clans and the clan leaders decide how it should be distributed. Thus, consultation with the clan leadership and gaining their support for the program were important; they would be the ones to make the savings and investment decisions for the portfolio companies. Consultation with the clans was conducted with each clan leadership hierarchy and their wives. The two principal leaders and Lesley gave support and encouragement to the clans during the consultations. As an indication of their support, the clan leaders decided to allocate a savings component from their monthly royalty payments. The amounts would be arranged with OTML Finance and transferred directly into the respective bank accounts of the clan portfolio companies.

Whole Community. First, the economic status of the community was presented as honestly and informatively as possible. Second, business concerns arising from the current situation were highlighted; some were already well known to the community so they were able to relate to these. Third, the sustainability issues associated with mine closure were noted and it was explained why economic capacity development was necessary to address some of these issues. The Mine-area Investment Program was
then introduced as a strategy to address the issues that were highlighted. The down-to-earth presentations at each of the 10 mine-area villages resulted in overwhelming community support for the program.

Community Business Leaders. At Ok Tedi, business and community leadership is synonymous and the economic benefits and opportunities of the community were controlled by the leadership. The leadership hierarchy can be best described in generational terms, i.e., first, second, and third generation. These leaders can be differentiated according to the following attributes:

- First-generation leaders
  - are signatories of mining agreements with OTML and the Government of Papua New Guinea;
  - are traditional and community leaders with overall say over the benefit streams;
  - control spin-off and contract local businesses;
  - have no education;
  - lack discipline, transparency, and accountability; and
  - provide no business leadership.

- Second-generation leaders
  - have education up to high-school level;
  - are recognized as leaders (they were first to be educated from this area);
  - control MRSM;
  - lack discipline, transparency, and accountability; and
  - provide no business leadership.

- Third-generation leaders
  - have education up to high-school level;
  - are recognized as persons with good leadership qualities;
  - control SMIHL;
  - are disciplined, accountable, and transparent;
  - have learned many lessons from previous leadership; and
  - provide honest business leadership.
It was important to bring the leaders and the community together around a shared vision and purpose so that they could move forward effectively and face the challenges ahead. Each level of leadership had custody over specific economic entities of the community, but there were questions regarding the management ability of community leaders.

A meeting was arranged for all the landowner directors (business leaders) of local businesses. The consultation was not intended to resolve long-standing business issues, but the third-generation leaders saw an opportunity at this forum to advance relevant issues. Many outstanding business leadership issues were brought forward but only some were resolved. Other issues, especially those involving third parties, would have to be addressed over time. In any case, the program already dealt with some of these issues implicitly, and this was pointed out to participants during the meeting.

**OTML Management.** Eighteen months later, after two thirds of the program had been implemented, David Wissink, the sustainable development programs manager in OTML’s Community Affairs Department, arranged a presentation to OTML senior management, outlining the progress of the program. The presentation was well received and OTML’s senior management commended the business development team’s efforts to help the community. Senior management made an undertaking to support SMIHL in its business endeavors, especially with OTML, during the remaining life of the mine. Lesley Farimiap, the chairman of SMIHL, felt empowered to say this in his presentation:

> We now have a company we can say is truly ours. Earlier in the mine life, outside parties took care of our affairs because we did not have the capabilities; however, that has changed with time; now we are capable to take decisions to conduct our own affairs. SMIHL structure gives us that opportunity to manage and control our resources by ourselves.

**Administrative Inputs**

Administrative inputs were required to establish the businesses under the three levels of investment, and to formalize the savings and investment decisions made by the community.
Investment Structure. The business registration documentation for SMIHL and the clan companies was prepared and lodged with the Investment Promotion Authority (IPA). The follow-up share registry work with SMIHL and the clan companies was also completed and lodged with IPA. The process of business start-up was facilitated with the board members of SMIHL and included coaching on their roles and responsibilities as directors.

Streamlining Local Businesses. The equity interests of the mine-area community in the local businesses were rearranged under the portfolio companies. The local directors of the businesses were chosen to present the shareholding rearrangement cases with their respective company boards. This process was found to be difficult and time-consuming because many third-party interests were involved. The local directors did not have the capacity to influence decisions on this matter effectively with their respective boards so the business development team stepped in to lend support. The shareholding change forms were lodged with IPA when endorsement was completed by the respective board of local businesses.

Technical Input

The technical input involved sourcing of finance for SMIHL, the business start-up process, and director training.

Sourcing Finance. SMIHL was a company on paper only and it did not have any start-up capital. A financing proposal for SMIHL start-up capital was presented to Lamin Trust board of trustees. Funding approval for a loan of K500,000 was granted to SMIHL and that gave life to the company.

Director Training. Given the dearth of business education and knowledge in the community, training was organized to train the local business leaders on their roles and responsibilities. The Australian Business Volunteer Service conducted the first training on Roles and Responsibilities of Company Directors for the local

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9 The Investment Promotion Authority is the organization that facilitates business registration and regulation in PNG.

10 Lamin Trust is a Future Generation Trust Fund established to set aside some money from the current mine benefits for future generations. It is independently managed under a trust deed through a board of trustees consisting of representatives from the Government of Papua New Guinea, landowners, OTML, and an administrator.
business leaders. The training was well received; however, the directors' low education levels made understanding the material difficult, even though it was simplified for their benefit.

**Business Start-up.** The board of directors for SMIHL was firmly in place and with business development team help, the board started to meet and direct the start-up process. The business development team provided initial advisory and secretarial support until the board could conduct its own affairs confidently. Soon after the establishment of SMIHL, the Tabubil Super Store contract came up for renewal and SMIHL submitted a bid with a joint venture partner (a supermarket chain in the country). OTML awarded the contract to SMIHL and the Tabubil Super Store business became the first investment for SMIHL. The company was now firmly in place. The missing element was the management role and that was sourced through the labor market. An experienced national was recruited to manage SMIHL and he has also been in charge of the business growth since 2004.

**Current Status of SMIHL**

Star Mountain Investment Holding Ltd has progressed very well as a business with solid performances over the last 3 years. The company is currently worth over K7 million with three subsidiary companies as well as property development and transport business divisions. SMIHL also has a management development program to support other local businesses in the community. The company employs up to 30 people in its operation. There are exciting future growth opportunities for the company, including the possibility of a joint venture with an Australian company for a major contract with OTML on the mine waste disposal project.

Lesley Farimiap credits its success to good business leadership in the board and effective management. He said, the SMIHL manager “picked up on the vision of the company and ran with it,” referring to the vision of the company as originally stated in the investment program. He said SMIHL eventually established itself as a competitive business and at current capacity the company is positioned to take advantage of other business opportunities outside the mine environment.
ANALYSIS, REFLECTIONS, AND LESSONS

This case study tells a story of a certain program, at a certain point in time, in a certain community, but the capacity issues highlighted are not unique. Rather, the experience and, particularly, the challenges are common to the many local communities across PNG that have been touched by large resource extraction projects. Nevertheless, some key lessons can be drawn from this case, specifically relating to the economic and organizational capacity of landowner communities and their importance to achieving sustainable development outcomes.

Early Consideration for Economic and Institutional Capacity Development

The predicament facing the Ok Tedi mine-area community regarding their economic sustainability at mine closure might not have been an issue if more care had been taken earlier in the mine life to strengthen local economic capacity. Most resource projects in PNG are implemented in remote and inhospitable parts of the country where government services, including business development, are inaccessible. For the communities involved, accessing services and support for development initiatives via these large resource projects is often a unique opportunity. Unfortunately, they often lack the know-how to manage development processes effectively, including inputs provided externally. In this case, assistance with economic structures that would enable better management of their benefit streams proved to be a worthwhile (albeit somewhat late) exercise that held out the possibility of a win-win situation for all stakeholders in the project.
After the Misima Mine closure\(^{11}\) experience, mining policy changes were initiated in PNG to ensure that mine closure planning takes place at the mine development stage. In particular, the plan must exercise foresight to achieve sustainable socioeconomic development outcomes in local communities by the mine closure stage. This is intended to provide communities an opportunity to address sustainability issues, including economic capacity, early in the project life rather than later, as has too often been the case. In addition, it provides a framework or at least a sense of direction for the Community Affairs Department or whoever else is implementing the development programs.

**Development or Dependency**

Positive developments can come undone in the absence of individual, community, and institutional capacity to sustain them. Regrettably, the communities in the Ok Tedi Mine area did not have the capacity to manage effectively what could only be described as a very complex change process. Consequently, as often happens in such situations, the community developed an unhealthy dependence on the mine that undermined the success of various efforts to support sustainable change. A higher level of readiness could have reduced the community’s dependence on the mine. However, that readiness was only evident much later in the life of the mining operation. Earlier, it was a matter of the community being willing but not able. The interventions described in the case helped the community become not only willing but also able to advance a development agenda on their own terms.

Landowner communities involved in major resource extraction projects always want development but they are usually not clear on how to achieve it. The companies or entities overseeing the resource project usually take on the responsibility for community development programs, often motivated by an interest to secure or maintain good relations with the community. In so doing, the responsibility for community development is shifted from the community to the project developer. The problem is that the resource company does not necessarily have the capacity or

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\(^{11}\) The Misima Mine was a gold and silver mine in Milne Bay Province. It operated between 1990 and 2004.
expertise to support community development, but nevertheless carries out the tasks as part of its obligation to the community.

As this case demonstrates, such situations can be aided by the engagement of a third-party intervener (Papua New Guinean in this instance) with the capacity to facilitate locally driven community development efforts. An approach that is working successfully in PNG is the nonprofit trust fund, Community Development Initiatives (CDI) Foundation. This foundation was established to help community development programs in areas of PNG where oil and gas projects are taking place.[^12] Since its inception, it has developed into a major partner influential in community development efforts in affected communities. CDI Foundation has sought to establish a “hybrid organisational culture of its own, attempting to draw the best elements from both the private sector and the non-profit sector”[^13] to generate sustainable benefits beyond the life of oil and gas production in its areas of operation. Most of CDI’s funding comes from Oil Search Ltd and joint venture oil companies in PNG, but it is receiving increasing support from other donors and partner organizations.

**Leadership Issues**

It is inevitable that mining changes communities and the lives of people who live near mines. At the same time, it presents unique opportunities. The economic development opportunities generated by Ok Tedi have been enormous. However, leadership has been a major challenge in managing these opportunities. Unfortunately, leadership in resource-rich communities in PNG is traditionally associated with land ownership rights rather than being determined by leadership qualities. As a result, the leadership that comes to the fore is not always representative of, or accountable to, the affected communities and may even work against their collective wellbeing.

This has been clearly demonstrated at Ok Tedi where two principal landowners controlled the community resources. They were traditional leaders but they also took on business leadership

[^12]: Oil project areas are Kutubu, Moran, and Gobe; Hides is a gas project area in the Southern Highlands Province; Kikori is the pipeline project area in the Gulf Province.
[^13]: Quote from Community Development Initiatives Foundation website (www.cdi.org.pg/intro.html).
roles in an environment they never fully understood. The first-
and second-generation leaders managed or oversaw much of
the community wealth and economic opportunities. Much of
it was mismanaged or squandered under their leadership. The
third-generation leaders were placed in a precarious situation;
they had to pick up the pieces and make something out of the
opportunity presented. What made the difference was that
the third-generation leaders could no longer put up with the
injustices caused to the community by the business dealings of
the first- and second-generation leaders. The third-generation
leaders wanted to change the course of events. Their opportunity
came with the imminent closure of the mine, which helped to
bring their concerns into focus more clearly. When they rose up
to take responsibility for change, the community was willing and
ready to support their initiatives.

Many of the problems with resource projects in PNG communities
can be attributed to poor leadership and ineffective management
of the benefit streams. As this case and others suggest, political and
social structures should be in place that guarantee accountability
of the leadership to community members to ensure these benefits
are managed in a sustainable manner, and for the clear benefit
of the community. This can be helped by project developers
committing to work, from the beginning, through community
structures that rely on democratic decision-making processes.

**Independence of Landowner Organizations**

The landowner communities in PNG have high stakes in resource
projects, which have to be managed effectively through their
own independent organizations. Landowner organizations—such
as the landowner umbrella company, landowner associations,
and women’s and youth associations—represent the various
interests of the community. These are all alternative structures
that can develop the socioeconomic capacity of the community.
Experience has shown the importance of the project developer
acknowledging and supporting the independence of these
organizations while working with and through them to support
development programs.

Landowner organizations could become more important
mechanisms for community empowerment in PNG. At Ok Tedi,
if these organizations had been established earlier and supported
effectively, their capacity to carry on might have been more firmly established by the time of mine closure. These organizations will remain in the community long after mine closure and they have the greatest potential, if properly equipped, to cushion some of the negative impacts of mine closure.

**Indifferent Business Management**

Due to lack of management capacity, the control of local businesses in the Ok Tedi mine-area was totally in the hands of outsiders. Local leaders at the board level also lacked the ability to oversee and direct these businesses. Thus, local business managers enjoyed much higher levels of responsibility than allowed for under the Companies Act. The accomplishments of these businesses in terms of increased investment and wealth creation for the community are difficult to measure definitively. In many cases though, people who were placed in positions of trust to manage the businesses have shown indifference and contributed very little to the economic empowerment of the community. A lesson that arises from this is the need to screen and appoint trustworthy managers who show genuine interest and concern for the community.

**Resource Benefit Redistribution via Landowner Umbrella Companies**

The landowner umbrella companies have the potential to develop into large-scale investment vehicles for the community. They also have the potential to contribute significantly to the overall development of the country.

Such umbrella companies have the capacity to finance business investment and growth activities. Obligatory funds, such as the Future Generation Fund, can be accessed to finance their activities, as was the case for SMIHL, which relied on the Lamin Trust. This financing was considered secure because the key stakeholders of the trust fund and the umbrella companies were the same, which helped to ensure a supportive environment for SMIHL. With this financial backing, the landowner umbrella company was able to access high-value contract work with the developer and build economic capacity quite quickly. SMIHL was also given considerable support by OTML because it managed to
secure contracts that would enable the repayment of loans while creating value and capacity for its business.

An AusAID-commissioned report[14] highlighted the fact that rural development in PNG was occurring in enclaves, and resource project communities enjoyed better socioeconomic services than their neighbors. One option advanced in the report to address the rural crisis in PNG was to “continue to work on community resource management systems that give priority to income generating income and sharing benefits on a long-term sustainable basis.”

As this case suggests, landowner umbrella companies can be a mechanism for managing the resource-related economic benefits of the community and even sharing the benefits with the rest of the country through investment activities. Such companies operate in numerous resource project sites around PNG. A key to success is having the capacity to bring communities together and the managerial and entrepreneurial capability to lead local economic development efforts. The experience from Ok Tedi suggests that, where that capacity does not exist in great measure, it can be fostered when communities are motivated, leaders are engaged, and existing skills are brought to bear to advance the process on local terms. Ultimately, the combined economic capacity of landowner umbrella companies can be quite significant, potentially positioning them as leading private sector investment players in the country.

CONCLUSION

There are many lessons to be learned from the Ok Tedi experience, including from the various community-based economic development opportunities that were lost due to lack of organizational, community, and individual capacity. These lost opportunities still haunt the community, especially as the mine moves closer and closer to closure, and as people realize that with all the benefits they have received so far they have not achieved much to secure their future. The unsustainable use of landowner benefits streams and the dismal performance of their business investments are the major contributing factors. Furthermore, the landowners’ approach to business and investment has been fragmented, while organizational capacity to use the available economic opportunities in a more sustainable manner has been lacking.

This case highlights the importance of strengthening the capacity of landowner structures in the early stages of a mine’s life in order to harness economic opportunities that can contribute to sustainable development outcomes in the community. Responsible and honest leadership, good supportive management, effective organizations, and an enabling environment for community stakeholders are also necessary to secure the economic opportunities presented in resource-rich communities. Ultimately, it is this combination of capacities and enabling conditions that need to be strengthened and mobilized to ensure that communities, such as the ones described in this case, move from dependency to sustainability.
Epilogue

A recent newspaper article\textsuperscript{[15]} suggests ongoing confidence in SMIHL as a local organization for the Ok Tedi mine-area community.

**Ok Tedi landlords up stake in firm**

OK Tedi landowners have invested K3.2 million in local company Star Mountains Investment Holdings Ltd (SMIHL). The funds came from the dividend paid by Ok Tedi Mining Ltd under the leasing agreement between the landowners and the miner, called miner’s special mining lease (SML) and lease mining purpose (LMP).

OTML general manager for community and business support David Masani, also a trustee of Ok Tedi Landowners Royalty Investment Trust (OTLRIT), said he was pleased that the landowners had reinvested their dividend earnings in their own company.

SMIHL is the umbrella company for Ok Tedi mine landowners and is owned by 32 clans from 12 SML and LMP villages.

SMIHL began commercial operations in 2004 and is engaged in business activities generated through contracts awarded by OTML. Such business activities included the Tabubil Supermarket, labour hire, accommodation, electrical engineering, construction and transport, along with joint ventures in civil engineering.

\textsuperscript{15} The National Newspaper, 14 November 2007.
From Dependency to Sustainability

The Star Mountain Investment Holding Limited (SMIHL) is a Papua New Guinean (PNG) landowner holding company operating in Western Province, in the shadows of the huge Ok Tedi mine. From Dependency to Sustainability documents how the mine area community, with the help of experienced PNG facilitators, mobilized three generations of mine stakeholders and enhanced their capacity to support sustainable economic development in the years leading up to and beyond the closure of the mine. The initiative drew on a Future Generation Fund and was, for the community, a response to years of frustration with wasted opportunities for economic development which were attributed to a lack of organizational and economic development capacity, capture of benefits by local elites, and the absence of a consensus on how to address the community’s long-term interests. Among other things, the case highlights the value of locally-led and facilitated change processes, and the understanding of local cultural dynamics and capacity issues that goes with it.

This sub-series is published by the Asian Development Bank to provide the governments of its Pacific developing member countries (PDMCs) with analyses and insights on key issues and lessons learned with respect to capacity development. Cases studied highlight a range of experiences throughout the region by sector, theme and source of external support, revealing approaches to capacity development that work best and the conditions that have been conducive to their success. They also explore the unique challenges faced by PDMCs in addressing capacity constraints as well as some of the opportunities facing governments and the people in the Pacific islands. Among other things, the case studies underline the importance of PDMC leadership, engagement of local partners, strategic attention to long-term capacity issues and effective use of external resources. It is our hope that the findings in these reports will help to guide future capacity building efforts in the Pacific.

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