

OK-FLY SOCIAL MONITORING PROJECT
General overview and 1992 advance report
summary for Ningerum-Awin area study

OK-FLY SOCIAL MONITORING PROJECT REPORT No. 3

for Ok Tedi Mining Limited

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March 1993
reprinted October 2004

What the study is about

The Ok-Fly Social Monitoring Project is a long term effort to report on the impact of the Ok Tedi mine on the people living between Tabubil and Daru in the corridor of the Ok Tedi and Fly Rivers, commissioned by OTML and carried out by consultants contracted to Unisearch PNG Pty Ltd of Port Moresby.

The focus of the consultancy team is geographic-anthropological with a bias towards examining development issues through field investigations at village level. This may contrast with an industrial development approach or, alternatively, with a restriction to some aspect of the physical environment such as the destruction of tropical forests.¹

So far, team members have visited all the villages within a strip of about 20 km on either side of the river (the Ok Tedi or Alice River to the D'Albertis Junction and the Fly River below this) between Tabubil and the border bulge. This covers all Yonggom speakers, all but a handful of Ningerum, and a large proportion of Awin speakers. In future years similar work is planned for the Middle (1993) and Lower Fly (1994).

This report

This is an advance summary of findings made in 1992. It precedes a full-length report by myself, which will take the form of a Ningerum-Awin area study, and a similar final report by Stuart Kirsch, of Mt Holyoke College, Springfield, on the Yonggoms. Here, I take Kirsch's preliminary comments into account, but I have not attempted to make a formal summary of them on his behalf.

The appearance of this report coincides with that of the *Statistical geography of the Fly River Development Trust* produced by David King of James Cook University, Townsville, presenting existing census and other quantitative data for all the Trust villages (King 1993).

Background

In 1991, social mapping fieldwork lasted three weeks and covered the main parts of the Ningerum Local Government Council. A prime objective of the 1991 report was to show how continuing work should be carried out and presented. In the short time available, the content of the report was confined to a descriptive-style social mapping of the area, with only brief commentary on key developmental issues and the relations between OTML and other parties in North Fly.

After a review of the 1991 report, at Tabubil on 19 May 1992, the present round of investigations was commissioned.

¹ I mention this because discussions at another mine site recently showed that some 'big' project economics issues may interest land owner representatives more than the nuts and bolts of the 'small' village economy that we study. Equally, the global issues of the purely physical environment may be more topical than the cultural use of it that we are likely to address.

Village visits

In 1991, I was able to visit most villages in Ningerum CD and some in North and West Awin CDs. This included both Trust and non-Trust villages. In 1992 I returned to North and West Awin CDs and took in almost all the villages I did not visit in 1991. The exceptions are a handful of very remote settlements, such as Brunai and Mohomnai. I had intended to cover South Awin CD, but time did not permit this (for example, while I have been there momentarily by helicopter, I did not pay a 'real' visit to Konkonda).

Map revision

A major result of the 1992 social mapping work will be a revised version of the 1:100,000 scale map produced in 1991. The study area is notable in that the National Mapping Bureau's topographic series sheets do not feature the 150 km-long Kiunga Highway, Tabubil other than its airstrip, and other infrastructure constructed since 1980. Further, much of the original air coverage on the 'Kiunga' sheet is of extremely low quality such that, in one notable instance between Kiunga and Runginae, stream lines are confused with ridges. Inspection shows that the course of the Highway departs from the original survey plans in several areas and, even since 1991, further roads have been constructed.

Issue: the 'kapa marasin' problem

My original decision, renewed in 1992, to widen my coverage to villages well away from the Ok Tedi river was amply vindicated by the discovery by both Kirsch and myself in villages as much as 25 km distant from the river of heightened fears of mine pollution. This centred on what it is convenient to term a complex of *kapa marasin*² beliefs. Indeed, while impacted villages on the Ok Tedi (notably at Kilometre 96, see pp. 18 and 45 of last year's report) were consistent in their recounting of grievances against the company in terms of actual physical impact, both the Yonggoms of the Kungim area and the inland Awins at Sonai and Haewenai expressed fears of *kapa marasin* exerting a deleterious effect on human health, the maturation of food crops ranging from sago to pumpkins, and the abundance of game animals.

Interestingly, relevant sections of the Applied Geology Associates 1988 report on Bougainville document almost identical fears around the Panguna copper mine while people around Lake Kopiago are now said (*Times of Papua New Guinea*, 22 October 1992) to be attributing deaths from '... high fever, dysentery, dehydration and difficulty in breathing ...' to discharges from the Porgera gold mine into the Lagaip River. In this recent case the people were claimed to have '... contracted the diseases by breathing air from the river during dry weather, walking near the banks, swimming and eating animals poisoned by the chemical from the river.' This almost exactly describes the set of beliefs now held around Ok Tedi.

² *Kapa marasin* should perhaps be best translated as 'toxic mine waste'.

Cases

Quite well thought out chains of cause and effect were used to explain how the *kapa marasin* causes harm at Ok Tedi. Here are three:

- *kapa marasin* is raised into the atmosphere in the form of dust and water vapour at the process plant; it is carried away in rain clouds which then deposit it on gardens and forests as far away from the river as the clouds can travel.
- Some years ago PNG Exploration Drillers put down drill holes along the Wai Kaekae, a tributary of the Ok Mart. The cores showed a similarity of geology between the subsurface Kaekae and the boulders in the Ok Tedi. This shows: (a) that the Ok Tedi once flowed where the Kaekae is today and the *kapa marasin* will flow into the upper Ok Mart along an underground channel, (b) the broken drill bits abandoned in the holes have contributed to puncturing obstacles to subsurface flows of water, or (c) both.
- The Ok Tedi is devoid of fish due to the *kapa marasin* pollution. But polluted fish escape from the main river and swim up the clean tributaries, and this is why, even if the water looks clean, it is dangerous to catch and eat fish from the Ok Birim, Ok Mart, Wai Kaekae, etc

It is important to point out that these explanations all rely on what are believed to be *physical* phenomena: no one ever offered a metaphysical, ‘action-at-a-distance’ explanation to me that I can recall. But there is little likelihood that refutation of the empirical content of any of the explanations would knock down the explanations themselves. The informants are drawing on their *cultural* beliefs when making these claims. These beliefs concern the ‘deep culture’ of human existence in the natural world, the proper relationship between themselves and the Ok Tedi project, and the relationships between themselves and OTML personnel and between themselves and other people. They have much less to do with physical observata or testable, falsifiable hypotheses about the effects of pollution which, by the *content* of the claims, seem obviously to be the matters in question.

Science and ‘Factor X’ explanations

A short digression is needed to illustrate one aspect of the problem. A biologist or pharmacologist might catalogue substances harmful to the environment by composition (particles, metals, acids, petrochemicals, etc), action on species or individuals (loss of habitat, prey or food sources; inhibited reproduction; abnormal growth; death; etc), or ability to penetrate and linger in biological systems (passage through the food chain; reactivity and chemical ‘half-life’; speed of absorption into environmental sinks; etc).

These distinctions are functionally useful as they help us to place environmental hazards in different risk categories, according to whether they can be intercepted or removed, or whether they pose an objective threat to us.

But non-scientists and, more particularly, people who feel their meaningful existence is threatened are unlikely to make such distinctions. Whoever they are, they may quite rationally hold to a ‘toxic trace contaminant’ viewpoint. No end of scientific evidence is likely to shake this. There are many familiar instances of this *outside* Papua New Guinea:

- many veterans hold that the Agent Orange herbicide used in Vietnam is responsible for, among other things, birth defects in children up twenty years after their fathers were sprayed. The position of the governments that sent them there is essentially that Agent Orange was a weed killer with topical, but not long-lasting, effects on accidentally exposed people.
- in 1981 the US government, through General Haig, accused the Soviet Union and its allies of waging chemical warfare in Cambodia and Laos. The effects of the supposedly deadly ‘Yellow Rain’ on human populations, it was claimed, ranged from vomiting and diarrhoea to mass death. In fact the Soviets and the Vietnamese had no such weapon. Received wisdom is that the faeces of swarming native honeybees was responsible for the phenomenon and the ‘symptoms’ must have been illusory or conflated from reports of unrelated events.
- it is an attractive folk-wisdom that food additives, i.e. colourants and preservatives which are added in small or trace amounts to processed foods, have the potential to induce abnormal behaviour in children. Many doctors are sceptical of any links; some recent studies claim to establish them.

The lesson to be drawn is not that one viewpoint or the other is inherently ridiculous—the ‘Yellow Rain’ case among the above is the only one to be closed—but that ‘trace contaminant’ hypotheses are stayers and, for various cultural, historical and political reasons, pick up a natural following. They are particularly hard to falsify: if the all but undetectable Factor X resists discovery, believers tend to be encouraged, not dissuaded, and to adjust their explanations accordingly.

In relation to the problem at hand, villagers make daily observations of the state of the environment. Unfortunately, in some societies of the region³ people have a view that the world is naturally ‘running down’; *any* changes, even random ones, may be interpreted as a decline. An example would be the distribution of game animals; it would, in this view, be axiomatic that game was unbelievably plentiful in the past. Any difficulty in finding game today, then, would be ascribed to a ‘loss’ of animals. Some changes must be attributable to new technology. For example, I surmised that guns would have had an impact on the abundance of wild pigs. Still, men at an inland Awin village said that it was wire snares that were to blame for a reduction in wild pig numbers beginning in the 1960s; guns and cartridges had never been common enough to do much damage. At all events, similar arguments of one kind or another might well apply to fish, birds and other animals, following from the introduction of fish-hooks, steel axes, changing styles of gardening and, most particularly, the greater permanency of settlements since contact. But these kinds of things are not really amenable to the construction of a comprehensive theory linking game loss to phenomena like pumpkins going soft on the ground and leaves turning brown in abandoned gardens. Big theories need grander culprits and the ‘smoking gun’ in village eyes is *kapa marasin*—an agent in the ‘Factor X’ tradition if ever there was one.

OTML denies that to all intents and purposes *kapa marasin* does not exist—that is, that tailings and other materials discharged into the river system do not contain poisons, metals at dangerous levels, etc—simply strengthens a conviction among villagers that the

³ Notably documented in a PhD thesis by D. Jorgensen on Telefomin.

company is deliberate in its method of garnering all mine benefits to itself and that, with the connivance of a distant government, is now breaking promises which it never intended to keep. To villagers, any denial flies in the face of their experience and is taken as continuing evidence of rejection by the company.⁴

Kirsch will have more to say on related aspects of this subject, as I will. Suffice it to say for the present that reassurances that the river system is safe, couched simply in physical terms, are bound to fail as public relations exercises. *This has little or no connection with the genuine complaints that impacted villagers may have with respect to the actual garden destructions that members of the consultancy team have witnessed* (see below, p. 6).

Issue: relations between the State, the company and villagers

The key issues at Third World mineral projects are often taken to lie in the relations between the multinational miner and the indigenous people of the project area or, if not there, in the relations between the State and the company. These themes have been well worked over and need not be repeated here. The third dyad linking the parties is, by comparison, greatly under-investigated. This is the relation between the State and the project area people. I intend to examine this rather difficult-to-investigate area in my fuller report. The following are some points that will arise.

The company

The company's job at Ok Tedi is, on behalf of its shareholders, to dig up copper for profit. Other activities are secondary. Naturally, the realities of the mining business means that, at a minimum, transport infrastructure must be built up around the project and, at a maximum, whole new residential communities must be created and serviced out of nothing. Such is often the case in Australia at mines in (formerly) remote locations, such as Mt Isa or Kalgoorlie, and such is the case at Ok Tedi.

In these circumstances, the mining company is very likely to infringe on the territory of government, such as in town planning, road building, and the provisioning of civic facilities such as schools. Even so, the division of responsibility between company and the local administration—provincial government in Papua New Guinea—is amenable to formal negotiation and is easily knowable. What is less certain and harder to nail down is the degree to which actions of implementation follow the intention of this division of responsibility. A case in point is where the company acts as an agency in running a governmental facility or providing a government service at an agreed-to, reimbursable cost. All would be simple if the reimbursement was easy to obtain but, as many have come to understand in any less developed province of Papua New Guinea, a rich variety of extenuating circumstances conspire to endlessly delay the production of budgetted funds.

⁴ It is worth recalling that the chief hurt felt by Vietnam veterans fighting for compensation over Agent Orange was of not being taken seriously or, indeed, of being reviled simply because they were veterans—both issues being at some remove from the question of physical injury.

It should be remembered that OTML is only one of a range of agencies and contractors providing government services in Western Province—others are missions and transport companies—as indeed is normal in many provinces. Predictable problems are experienced, almost all in the area of prompt payment. In some cases, the outcomes are serious. Small airlines with large unpaid accounts necessarily refuse to fly even emergency charters; medical evacuations cannot be made, and sick patients die.⁵ In other cases, only inconvenience results, such as when a classroom lacks desks. It might be thought that, as OTML has a rather greater financial capacity to absorb temporary ‘losses’ than agencies like missions, people in the community do not suffer from an interruption in services. But, in reality, even OTML is ‘once bitten, twice shy’ and *other* activities that could easily be assisted by company resources if a relationship more resembling a partnership were established do not go beyond the discussion stage (e.g. joint planning of infrastructure now provided under the Fly River Trust’s operations and, for the sake of an example, joint immunisation patrols outside the Tabubil health centre’s catchment).

The landowners

The various Ok Tedi agreements essentially prescribe how the company should act in respect of the project area landowners, who essentially form two groups: the SML royalty-earning landowners and the various LMP leaseholders. About half of the latter live in the OFSMP study area; I do not intend to comment further at this time.

The ‘Alice people’

A particular group of people is currently the most vocal, namely the ‘Alice people’. Most of these have compensation claims for the loss of river bank gardens, economic crops and, in some cases, cemetery sites caused by Ok Tedi flood damage⁶ since the start of mining. These people are not mentioned in the mine agreements, and they do not therefore receive royalties. However, the villages they live in are all⁷ in the Fly River Development Trust and they have already received benefits from it in the form of water tanks/haus win, VDF payment and certain other projects (see statistical summary in King 1993). A 20% slice of SSG funds is earmarked for the ‘Alice villages’ (exact definition uncertain), but a clear picture of SSG spending to date has not yet emerged (1990 SSG, nil; 1991 SSG, spending in progress; 1992 SSG, not yet released).

These things, though, currently take second place in the minds of the Alice people behind the matter of flood damage compensation. I wrote last year that liability had not been admitted; this was incorrect as correspondence not then available to me reveals that a decision to admit claims was arrived at some time between October 1990 and July 1991.

⁵ A Kungembit villager died of snake bite at Kungim on 23 August 1992. While this was probably not the only option, air evacuation to hospital was ruled out once it was appraised that the mission pilot, who, unlike the creditor commercial operators, would have flown, was out of the province.

⁶ ‘Flood damage’ will be here taken to mean all land, crop and habitat losses due to erosion and over bank sedimentation along the river since the start of mining. Flooding, as such, may not be the only way for this to happen.

⁷ There are isolated cases of river bank landowners who live in non-Trust villages.

Following a judgment in mid-1992 by the Mining Warden, a first round of payments has now been made.

This is an area of great interest, not least because of the great disparity in impact on Alice people as compared with Ok Ma leaseholders—the people resident in the LMP areas originally excised for the purpose of building the Ok Ma tailings dam—some of whom come from the same villages and (legitimately) migrated to the Ok Ma settlement. At Ok Ma, the leaseholders are paid K300-K350 annually, have not been impacted after all, have a well-staffed school and receive extra health services by virtue of living within 40 km of Tabubil. Their Alice neighbours, by contrast, will by rights receive *one-off* payments averaging K300-K350 in respect of crop damages and losses of gardens, graves and economic trees. As can well be imagined, the Alice people are unlikely to think of their payments as the last word on the matter.

OTML's involvement in processing these claims—that is to say, in determining who should be paid, and what amount should be paid—is slight. I have more to say about this below (see page 9).

Relations between the State and villagers

The literature on relations between the State and village communities in Papua New Guinea is voluminous. However, a large part of this concerns the transformation of village-level leadership into the formal politics of parliaments and the establishment of a pluralistic democracy. It may consequently be argued that a preoccupation with these matters has been at the expense of a good overview of the actual workings of administration. For example, there has been much debate about decentralisation and the optimal arrangement of the three tiers of government in Papua New Guinea, but much less hard data published on how the lower tiers—at the 'sharp end'—work in practice.

Anecdotally, it can be said that this or that provincial government⁸ does or does not perform well in the delivery of services, but since access to remote areas ranges from excellent to very poor across the country, anecdotal comparisons mean little. A 'poor performer' may have the reasonable excuse of a large area to cover, scattered populations, a lack of roads, and a scarcity of resources. But when a large mine like Ok Tedi begins operations the situation changes. Many infrastructural difficulties are wiped away at a stroke and the resources available at provincial level increase enormously. This gives us a unique opportunity to see whether dramatically improved circumstances makes any difference to the quality of services offered, given essentially the same decision-makers and implementers in place.

Indicators of development

I can give a partial answer here. In the new or enlarged urban areas of Kiunga and Tabubil, it will be possible to show a great increase in government activity, such as an expansion in teacher numbers, increased spending on roads and the opening of better facilities. There is no gainsaying the progress seen here. In rural areas, too, it may be

⁸ This entire discussion was written before the suspension of FRPG.

possible to find indicators that show that there are more aid posts than formerly or more funds available for local projects. But in my and King's investigations, and despite our natural keenness for statistics, formal indicators tell very little of the story. The crucial thing is not whether a health sub-centre exists, but whether it is staffed with a nursing sister or has any medicines or a working fridge with necessary, but perishable, drugs in it; not whether money is allocated for the maintenance of a road, but whether funds were released and the contractor did more than muddy the track with his heavy machinery; not whether ten DPI extension staff have been put onto rubber rehabilitation, but whether any local tappers have harvested any rubber at all in the year. Many other examples could be listed at will.

Implementation problems

Because of this yawning gap between the paper programme of provincial activities and village reality, I went out of my way to visit the sites of projects mentioned as budget items trying to discern visible progress. This was complicated by uncertainty over which budget year particular monies may have been drawn from. Ideally up-to-date provincial accounts would be to hand, but I realise this is an impractical request. Even so, I believe firm conclusions can be drawn in some matters. I often found:

- budgetted items did not address needs on the ground
- budgetted items addressed genuine needs but the *form* of their inclusion betrayed an absence of planning
- budgetted items were worthy but involved complex concepts and were unaccompanied by information on implementation, nor was provision made for design studies
- budgetted items were worthy but too ambitious for the local contractors insisted upon by local members or councillors
- budgetted items repeated the spending in previous years on the same items after which no review had taken place
- budgetted items had no reasonable place in governmental spending

I hope to illustrate these points in due course and I should add that in perhaps half the areas mentioned public servants were aware of the problems. They were always able to point at bottlenecks in the system and there was none without an opinion about what others could or should do to fix things. However, it was also evident that this was accompanied by a certain casualness over things that were simply not getting done and causing great inconvenience to others.

The most blatant example of this was that the local government councils of North Fly had not received *any* funds in 1992 by September—for staff salaries, sitting allowances, office consumables, station maintenance, etc—and Ningerum LGC, at least, had closed down. On this score heads should roll. If 'administrative procedures' were to blame, those supervising the procedures are responsible and should be demoted. If it was a person's fault, their non-performance should win them dismissal *and* dismissal or reprimand for the superiors whose job it is to oversee them. If reasonable excuses could be made, a whole range of people should be stood down for not bringing them to light earlier.

This last case highlights the contrast between national debate over decentralisation and reality in the bush. It may be the case that local government councils are ineffective and should be abolished or replaced, *but this should be formally decided by those empowered so to act*. They should not be killed off through administrative incompetence or simple oversight.

Government mine-impact field investigations

The most serious example of the State’s incapacity to step up its regulatory response in line with development needs that came to my attention concerned the investigation of garden damage along the Ok Tedi river. In due course I will document this in detail, but we know that serious damage began in the section between Haidauwogam and the D’Albertis Junction sometime after 1988. The current procedure (Figure 1) is for a complaint to be made to the Mining Warden, who must then order an investigation by District staff before issuing a judgment on appropriate compensation. (In principle, the mine operator could appeal against the Mining Warden’s judgment, but to my knowledge this has never happened.)

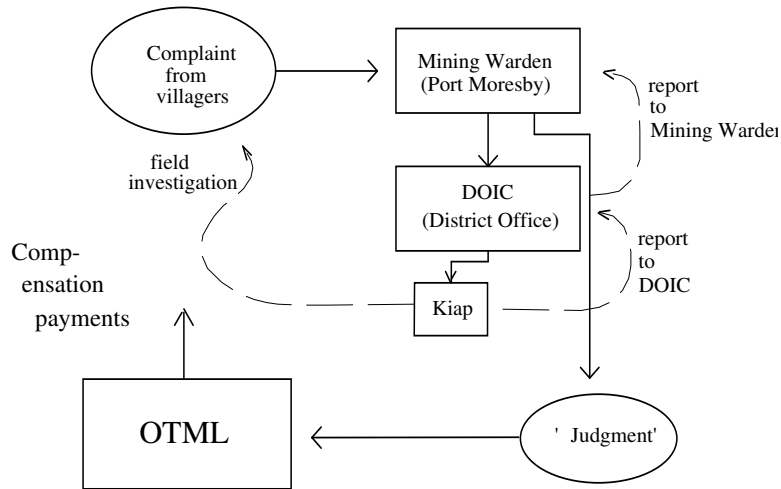


Figure 1. Procedures for claiming compensation outside lease areas.

On the basis of my investigations, which I will present in full in due course, it is evident that the procedures should change. They are superannuated and betray a lack of urgency or seriousness on the part of the State to put matters to rights. At Kilometre 96 a first series of claims were paid out on 5 August 1992, only for the Kiunga Highway to be blockaded three days later by disgruntled neighbours whose claims had not been looked into. The response has been to re-start investigations in the area which is quite correct. However, an examination of the Mining Warden’s judgment in respect of the first set of claims and inspection of the new claims (work in progress at the Tabubil District Office) reveals significant problems:

- the Mining Warden (or, equally, the Project Liaison Officer) has no permanent representation in the Districts and must requisition District staff to carry out investigations
- Only a few hours of a field officer’s time is evidently allocated to the compensation investigations at a particular village; most claims are typed up from handwritten lists submitted by the claimants, not from the officer’s own inspection

- The claims are not based on ground survey. Gardens claimed for at Km 96 in 1991 were paid out at the fixed rate of K270 per ‘garden’ and the sites of nearly half were not actually visited by a government officer because a canoe was not available to cross the river with.
- Villagers are making multiple claims for compensation for the same damages without being detected. One man appears twice in the first judgment; many who were paid in August 1992 have claimed again since.
- The Valuer General’s list of compensation payments does not fit the situation and requires revision.
- It takes an inordinate length of time to receive complaints, process claims, and see them paid out; in the Km 96 case, apparently about twelve months to arrange site visits, ten months for the Mining Warden’s judgment to be handed down, and a further month to organise payment—about 23 months in all.

The cause of the delays and the unsatisfactory nature of the field investigations can be put down to staffing inadequacies at the two District Offices concerned. It is worth realising that the combined strengths of the OTML Community Relations and Business Affairs, and Environment Departments is over fifty.⁹ By contrast, Tabubil and Ningerum each only have an OIC and his deputy, plus typists. At neither place would the individuals concerned profess a special expertise in lands work. Other provincial staff have made occasional trips to look at the problem, but none has been allocated to assist with systematic field investigations. I am certain that this would be ascribed locally to the fact that the responsibility really lies with a national government office. Nonetheless, no senior public servant I talked to raised the matter and the delays and inappropriate nature of investigation seemed to be of little concern to them, if indeed they were aware of it.

Nothing to discuss

The last point raises a final issue of the responsibility of the State, represented in the persons of its officials and political figures, towards villagers affected by mining operations. These people owe the community a special duty of advocacy in their dealings with the company. A short anecdote will illustrate the political side of this topic. I visited the only indigenous North Fly leader to have represented his community in the national parliament in 28 years, which he did in the 1970s. I wanted to find out what special points he had raised in negotiations with the national government and the exploration company involved. But all he said was, ‘*Mi pait strong long kisim main*’—‘I fought hard to get the mine’. I tried a different tack, and then another; he still had only one answer.

Now it could be argued that North Fly people are not really Pidgin speakers or my command of pidgin idioms is insufficient for me to tease out a more elaborate answer. But he did speak excellent Pidgin and I was accompanied by my colleague Vincent Warakai, who also tried, with a better grasp of 1970s national politics, to extract further detail. He also failed. We did not elicit the names of any ministers, advisers from Minerals and Energy, company representatives, or even the name of the company involved in dealings at the time (it was probably Kennecott).

⁹ About twenty for Community Relations and about thirty-five for Environment in mid-1992, all up.

The point of this story is that *I did not detect any other basic position* among other leading community figures towards the overall concept of having the mine than this one.¹⁰ It is hopelessly inadequate, considering all the issues that a new mine brings to the fore. Predictably, things go wrong in big projects or require to be worked out differently; an incapacity to sort out issues does not serve the people well.

It is not my intention here to deride a particular person. The problem is wider; the non-answer betrayed a district-wide reluctance or inability to confront the big issues. Again, it might be said that this is a case of undereducation and little should be made of it. If this is the case, there is all the more reason that relevant provincial and national government departments should take North Fly mine issues a lot more seriously and should take a lead in these matters. But as I have already argued and briefly illustrated, and despite Bougainville, I do not see this happening.

Conclusion: sovereignty or dependence?

‘‘Long ago, foreign trading interests established a presence on the shores of the Big Island. Later, the governments of these trading interests licensed them to officially act on their behalf, or sent their own representatives, and the colonial period was born. Nearly a century passed and native-born Big Islanders won over control of their own affairs and a new nation was born. The new Government, its servants, and all the people everywhere promised to look after each other and care for *all* the districts—not just their own, or those well served by roads and close to towns. ‘We promise not to need outsiders to look after us’, they said. But then a large company established a mine and the people were happy because money flowed into the treasury. Again everyone promised to look after the people who lived near the mine. But in their hearts they thought that the company would look after them. After a while they became neglectful and forgot to watch over the people properly and the people cried out for help. Sometimes the company helped them and the people said ‘it is true, the company will help us!’. When the company did not help them, they cried and grumbled because no one would help them at all. But the people of Big Island did not notice what was happening to them. They had forgotten their promise to look after each other. Instead they had grown dependent on outsiders, just like they had promised not to.’ ’’

This is a parable, not the story of Papua New Guinea. For a start, though foreign-backed, the operator at Ok Tedi is a Papua New Guinean company and secondly a good number of people work selflessly in the remotest places serving their people. (I have met many.) But there is enough that is familiar in the parable to illustrate what looms as the big issue at resource development projects. When the projects end, what will the people have in place to serve them thereafter? I have titled this conclusion ‘sovereignty or dependence’. In my mind this is the far horizon for Papua New Guinea and its mining industry. A mine pollutes or it does not, it causes social impact or it does not—these are matters concerning the regulation of the industry, not the imaginary conscience of the share-market. The activities of the Trust, awareness programmes, local business development initiatives, and

¹⁰ What we might call ‘extremists’ had much higher expectations, of course.

other things sponsored by the company, are all individually commendable, but collectively they simply throw the spotlight onto failings elsewhere.

There is an inescapable price to pay for control of project area development. If the State seeks to act with a firm sovereign hand (as a regulator), but abandons its responsibilities in relation to basic services and infrastructure, it trades away the institutional capacity to maintain an effective presence in the area.¹¹ Only by governments taking charge of their responsibilities to build up and service local infrastructure, *and by the people themselves seizing their own opportunities in a realistic manner*,¹² is the business of granting mining leases worthwhile in the long run. This is not happening in Western Province.

I have concentrated on two problem areas here: the first being beliefs of decline in the environment and the second being the weak performance of government in delivering services to villagers. I have *not* dwelt on the villages of the Fly River Development Trust and I have *not* examined the question of actual physical impacts; there will be a time and a place to do so.¹³ In my opinion, what I have focussed on are the most loom over all other things, including the worth of the Trust.

These are the broad outlines of my recommendations:

1. much more information about Ok Tedi must be available to villagers, *not* in the form of simplified press release-type materials, but through the medium of awareness programmes essentially run by community members trained to carry them out:
2. 'critical literacy' in general development issues must be fostered, else villagers will continue to be largely passive recipients of 'aid' from OTML (V. Warakai will elaborate in his findings)
3. the Fly River Development Trust is obviously getting a variety of things done; time is needed to evaluate its achievements: no change is recommended in the short term
4. it is essential that a dialogue be opened up with the new national government concerning the substantive matters of District services in Western Province

Afterword

Having written as I have, there have been two significant developments in relation to the project and our reading of its social impact.

¹¹ One might add that a notable 'brain-drain' of top staff from the Department of Western to OTML is contributing to this loss of institutional capacity.

¹² I can hardly help mentioning a certain correspondent whose work makes repeated appearances in District Office files and who wrote asking for a billion Kina *a fortnight* as long ago as 1984. When I met him he was not so fussy about money, but wanted all permanent materials houses, a supermarket, a bridge and a helicopter for his mountain top hamlet.

¹³ I did dwell on them in my 1991 report; I will add further analysis and data in this year's report.

Firstly, the incoming Wingti government acted to suspend the Fly River Provincial Government in late 1992 and, at the same time, launched a series of initiatives under the Village Services programme. Obviously my fourth recommendation takes on new meaning in the light of the suspension, but I see no reason to alter my fundamental position, especially as the thrust of my arguments concern weaknesses in planning and budgeting in Western Province, as admitted by its own administrators and as witnessed on the ground, and the practically nil capacity for review and follow-up. This will not change with the removal, temporarily or otherwise, of the political tier of governmental administration. Of course, it is the aim of Villages Services to address essentially the problems of service delivery that I have outlined—but I have to caution that, again, the same institutional capacity and human resources will exist on the ground in Western Province and no end of good aims and objectives will by themselves repair the weaknesses I have found.

Secondly, R. Jackson's major review of the project has been published (Jackson 1993). Sub-titled '*the development of the Ok Tedi project 1982-91, a personal view*', this attempts to evaluate the forecasts and recommendations stemming from the original project impact plans and found in the early Ok Tedi literature, much of it carried out by Jackson himself or by co-workers and colleagues he was in close touch with at the time (e.g. Jackson 1977, 1982; Jackson et al. 1980; Jackson and Ilave 1983; Filer et al. 1984). The overlap with the present work is slight as Jackson's focus is more on infrastructural matters and the handling of the project against a national backdrop, than on village affairs. However, my reading is that we are in close agreement on the issues that we do cover together. This is particularly marked where he discusses the Provincial Government's inability to spend the windfall revenues it has received as a result of the presence of the Ok Tedi mine:

Daru town is very little different in appearance today from what it was ten years ago. There are no material signs of any great expansion resulting from increased administrative spending ... (p. 60)

Fully one-third of the 1991 non-wages expenditure was accounted for by consultancies, investments and contingencies. It would be interesting to know what the total of unspent funds accumulated by the FRPG is, in the light of the generally poor developmental state of the province ... (p. 61)

The [FRPG] has had a very poor record of overall expenditure and a worse one of productive expenditure: there is very little to show for the high level of financial support it has received from National Government and royalty payments to date ... (p. 145)

I repeat my injunction above (p. 7). From the point of view of the present project, Jackson's restudy is the first to be able to provide the historical depth that the concept 'monitoring' carries with it. By this token, its style of reasoning and presentation are simply a powerful argument in favour of the adequate documentation of change and for going on collecting routine information in an impact area for the whole life of a resource project. The hiatus, noted in last year's study (Burton 1991:4), between the earlier 'Jackson phase' of Ok Tedi studies—which effectively terminated in 1984—and our own should not be permitted to occur at other resource projects in Papua New Guinea.

Bibliography

- BURTON, JOHN 1991.** *The Ningerum LGC area. Ok-Fly Social Monitoring Project Report No. 2.* Port Moresby: Unisearch PNG Pty Ltd. for Ok Tedi Mining Limited
- FILER, COLIN, T.S. ILAVE, RICHARD JACKSON AND PAT TOWNSEND 1984.** *The progress and impact of the Ok Tedi project. Report No. 2.* Boroko: Institute of Applied Social and Economic Research
- JACKSON, RICHARD 1977.** Kiunga Development Study. Draft. Report for Office of Project Co-ordination, Department of Finance, Port Moresby
- JACKSON, RICHARD, C.A. EMERSON AND ROBERT WELSCH 1980.** *The impact of the Ok Tedi project.* Konedobu: Papua New Guinea Department of Minerals and Energy
- JACKSON, RICHARD 1982.** *Ok Tedi: pot of gold.* Port Moresby: Word Publishing/UPNG Press
- JACKSON, RICHARD AND T.S. ILAVE 1983.** *The progress and impact of the Ok Tedi project. Report No. 1.* Boroko: Institute of Applied Social and Economic Research
- JACKSON, RICHARD T. 1993.** *Cracked pot or copper bottomed investment? The development of the Ok Tedi project 1982-91, a personal view.* Townsville: James Cook University, Melanesian Studies Centre
- KING, DAVID 1993.** *Statistical geography of the Fly River Development Trust. Ok-Fly Social Monitoring Project Report No. 4.* Port Moresby: Unisearch PNG Pty Ltd. for Ok Tedi Mining Limited