

## INTERIM FINDINGS FOR 1994

OK-FLY SOCIAL MONITORING PROJECT REPORT No. 8

for Ok Tedi Mining Limited

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## PREFACE

This summary volume is the eighth in a series of reports for the Ok-Fly Social Monitoring Project. Colin Filer's *Baseline documentation. OFSMP Report No. 1* and my own *The Ningerum LGC area. OFSMP Report No. 2*, appeared in 1991. My *Advance report summary for Ningerum-Awin area study. OFSMP Report No. 3*, David King's *Statistical geography of the Fly River Development Trust. OFSMP Report No. 4*, and the two major studies from the 1992 fieldwork, Stuart Kirsch's *The Yonggom people of the Ok Tedi and Moian Census Divisions: an area study. OFSMP Report No. 5* and my *Development in the North Fly and Ningerum-Awin area study. OFSMP Report No. 6*, were completed in 1993.

I gave a precis of our findings to 1993 in *Social monitoring at the Ok Tedi project. Summary report to mid-1993. OFSMP Report No. 7*. Some material from this and Report No. 6 were included in a paper presented by me at the 'Mining in the Asia-Pacific Region' workshop held at the Australian National University in September 1994 entitled *Local-level mining benefits in a mal-administered regional economy: the case of Western Province, Papua New Guinea*.

The present volume is an interim summary of the fieldwork done by members of the OFSMP team in 1994, other than myself, pending a full reporting of the findings by all of us in due course.

John Burton  
Canberra

## WORK IN 1994 BY DAVID KING

### David King's February fieldwork

*King's first field visit during this round of work took place over the period 14-26 February 1994. His instructions were to test out the village survey methodology he had previously used at Hidden Valley, Morobe Province, get a feel for the development problems of the Fly, notably Middle Fly, and make any necessary adjustments to his survey forms in preparation to applying them to a formal sample of villages in the Lower Ok Tedi-Fly River Development Trust and enabling us to be able to put numbers to the trends we might pick up using other field methods.*

This section is a descriptive account of places and persons visited, along with an explanation of the purpose of the visit. I do not attempt to discuss my results or findings here, which I will do in the completion report for this year.

I approached the fieldwork in relation to three main themes:

1. Problems, meaning and practice of sustainable development in the project area;
2. Views, information and data from government officers, non-government organisation workers, local businessmen in both the formal and informal sectors, as well as from company personnel;
3. An emphasis on the Middle Fly, primarily the Boazi villages.

### Itinerary

*Sunday-Monday 13-14 February*

Travelled Townville-Cairns-Moresby-Tabubil. Met in Tabubil with M. Eagle, I. Wood, M. Paining, A. Buhupe, R. Ette and J. Ransley.

I obtained VDF data for the Lower Ok Tedi-Fly River Development Trust from Robin Ette and was able to examine his files for Middle Fly villages to obtain population figures and data on economic activities. Robin expressed disquiet over the way I had handled earlier figures in my previous report (*OFSMP No. 4*); in particular, he was upset that calculations of *per capita* VDF receipts were presented by me. While that report stressed the extreme paucity and unreliability of *all* the figures in the report (from all sources), and thus the need for improved data collection all over Western Province, in this case the figures were his own. I included them with the other data assuming, I believe correctly, that the report would only be circulated as a working document. In that we have now identified the discrepancies, this has served its purpose. More aggregated calculations will appear in my final report, where it will be appropriate to apply the conventional confidentiality principle—when applied, the level of detail in published data should allow the identification of locality no closer than 'city block' or, in this case, an appropriate rural grouping of villages, such as a Census Division.

*Tuesday 15 February*

At Kiunga. Met with: S. Kume, Projects and Planning Office, North Fly House; Sr. Pat of the Montfort Catholic Mission (MCM); P. ?Lansford of Ningerum Transport; and Chew Boo of the North Fly Rubber Factory. Information was obtained on population, on the budgeted development projects being run by the Projects and Planning Office, a copy of the 1993 provincial budget, on infrastructure and services, and on prospects for the rubber industry. No strong opinions were offered concerning Lower Ok Tedi-Fly River Development Trust projects.

*Wednesday 16 February*

At Lake Murray. Met with the OIC and Police Officer, Lake Murray station. Discussions centred on the infrastructural and developmental problems of this forgotten district. No data were found at the station relating to Middle Fly villages. It was stated that routine patrolling to these villages had not been done for many years as a consequence of a lack of funding. There was a general attitude amongst the station staff that OTML's activities in the Trust villages was a positive thing, and that Trust projects were the only ones going ahead in the district.

*Thursday 17 February*

At Lake Murray, then Kiunga. Visited Maka village with Sowati Ole, the University of Papua New Guinea Extension Centre Director. Met briefly with Ralph, a local businessman and crocodile skin buyer who occasionally visits the Middle Fly.

*Friday 18 February*

At Daru. Met with W. Baiyo, Projects and Planning, Department of Western; J. Mipari, Provincial Statistician; J. Ibali, Senior Research Officer, currently undertaking a study of the development needs and potential of the Middle Fly; and the Provincial Works Coordinator, Daru. Data were obtained on development projects, and discussions centred on the 1994 budget and future directions in the development of the province.

Public servants here expressed strong disapproval of OTML's involvement in development projects in the Trust villages. This same opinion was held at the time of my previous visit to Daru in 1992; if anything, those I spoke to had been more disapproving and more negative on the earlier occasion. Their position remains that it is the role of provincial government to extend development to villages, not that of the company, and that funds should be handed over to them to administer directly. However, morale in Daru was not high, as government officers alleged that corruption was widespread and admitted the failure of the provincial government to bring about development.

In Daru there seemed to be greater support for the suspension of the provincial government than there had been in Kiunga. There was some optimism that matters would improve in the next couple of years.

*Saturday 19 February*

At Kiunga. Met with Sr. Pat and Chew Boo. Further data were collected on the Catholic Church agency schools, for which Sr. Pat has responsibility, and on proposals to the

Department of Agriculture and Livestock for a freight subsidy for rubber coming from village to the south of the Kiunga factory.

*Sunday 20 February*

At Kiunga. Further meeting with Chew Boo to collect rubber production figures. Had general discussions with Bruce Gigmai of Fly River Provincial Government and S. Ole of UPNG.

*Monday 21 February*

At Bosset. Met with the priest, Fr. Edward, Missionary Society of the Philippines, and the three resident Montfort sisters. Extensive information was obtained from Engel Kamuzib, the Trust Supervisor at Bosset, concerning Boazi life, Bosset village and Trust projects in his area. Further information was supplied by Edgar, the Southwest Air agent at Bosset. Attitudes to Trust projects were quite positive, but there was general belief that various environmental problems, such as the recent drought and grass infestation of Bosset lagoon (Lake Wam), were the result of sediment and heavy metals derived from the mine. Also attributed to the same source were beliefs that maternal deaths and general sicknesses were more common than previously.

*Tuesday 22 February*

At Bosset, then Manda. Travel to Manda village was by canoe, accompanied by E. Kamuzib. Met with Bonny Benjamin, manager of the Komaizi Business Group, which operates an OTML-supplied fish freezer. Visited fishing and crocodile projects at Manda, and collected fish catch and sales data.

*Wednesday 23 February*

At Bosset, then Tabubil. Further discussions were held with E. Kamuzib, Xaverius Lucas, the manager of Wam Fishing, Edgar, and Marcellus Markus, the Provincial DPI Rubber Extension Officer stationed at Bosset. Xaverius complained about OTML's withdrawal of maintenance support for the fishing project, but put most of the blame for the project's demise on Manda and Obo villagers, who he alleged had stolen their nets and were taking all the fish out of the river. A real problem is the increasing infestation of the lagoons and waterways with the Climbing Perch or 'walking fish', as it is known locally. This problem was not blamed on the company.

*Thursday 24 February*

At Tabubil. Met with M. Eagle, J. Burton and others, reporting on this field trip.

*Friday 25 February*

In Port Moresby. Meetings at Unisearch office, National Statistical Office, and with Warren Dutton. Went to UPNG library to do literature search. Further information obtained on population, rubber and refugees.

*Saturday 26 February*

Travel from Port Moresby to Cairns and Townsville.

## Conclusion

In the notes above, statements in relation to OTML and the Trust are as made to me by informants. They do not represent my opinions and are reported here for information. I will expand on the question of people's attitudes in my main report as what people *perceive* and what they may hold as *misconceptions* are, I believe, just as important as factual data we may gather. (I do not expect any of the criticisms expressed by informants to be ascribed to me personally.)

### *Editor's note*

*Statements of similar to those heard by King were also made to the other team members all over the province. Some points we shall expand on are:*

- *public servants in all parts of government are quite consistent in blaming the lack of development in Western to shortages of funding, the corruption of others and general non-performance; it is noteworthy that they beg the question of what initiatives they have personally undertaken to improve matters;*
- *the excuses for the failure of Wam fishing will be interesting to match against an actual history of external support; before OTML, the Montforts, the Commerce Division and the Australian Army have all had a hand in technical assistance.*

## David King's June-July fieldwork

*King's second field visit for this round of work took place over the period 19 June-2 July 1994. This time King was to attempt a more formal sampling survey. In theory, Papua New Guinea is a prime candidate for the use of sampling methodology; administrative regions are large and settlements far apart, making it time-consuming and expensive to attempt to survey every community in an area within a reasonable time. But in practice, very few studies have ever used sampling methods because it takes considerable ingenuity to adhere to the simplest assumptions that render sampling valid—that (a) the sample is drawn from a fully known 'sampling frame', and (b) once a sample is drawn, the researcher must stick to the nominated sampling points regardless of travel inconveniences.*

*In respect of (a), King and I were able, through our earlier visits and of course with the help of information provided by OTML Public Affairs, to build up a reasonable knowledge of the 'sampling frame', namely the disposition of the hundred or so Trust villages, together with their social, cultural and geographic affiliations to each other and to major centres. The frame was not perfectly bounded—in some areas Trust villages had significant interactions with non-Trust villages—but it was possible to pretend it was for the purposes of the survey.*

*In respect of (b), I had worked out a 'travelling salesman's route' that, if all went well, would take King the length of the Ok Tedi-Fly system over the two weeks he had allowed for, taking in the balance of villages shown in Table 1. In the event, King was predictably held up by the need to spend time finalising travel arrangements, by hours of delay in the arrival of an aircraft (at Obo), and by extremely heavy seas (in the Daru area).*

*Of course, how journeys turn out is one of the most common ingredients of conversation in Papua New Guinea; in fact, 'journey stories' are such a performance in themselves that it is*

*easy to miss the fact that in social research travel is part of the method. (Most typically, a grant-funded student researcher has few means to travel; single-village studies are the norm, and regional studies are often proposed but seldom carried out successfully.)*

*With all this said, King was reasonably successful in being able to follow what we had proposed. King shuns the term ‘sample survey’ and calls his individual village surveys ‘case studies’. However, the method we used does have a name; it is ‘purposive’ sampling, because the ‘strata’—the areas chosen for representation—and the particular villages within them—the sampling points—were both nominated by us rather than being selected in some ‘fairer’, numerically based manner. (I suppose it would be accurate to describe this as ‘Claytons’s sampling’.)*

Nominated sampling ‘strata’	Nominated villages	Means of access to villages	What happened in actual survey
Kasuwa (north) Ningerum	1	By road to Ok Ma settlement	exact village surveyed
Alice (south) Ningerum	1	Road, ferry, walk 6km	exact village surveyed
Awin (West Awin CD)	1	Road	more appropriate village
Yonggom (Lower Ok Tedi)	1	Helicopter	cut (avoid overlap with Public Affairs staff)
Zimakani (Middle Fly)	1	Southwest Air, canoe 2hrs	exact village surveyed
Middle Fly corner at Kiunga	1	Town	cut (aircraft delay)
Kiwai (South Fly)	2	Dinghy charter 1hr / 8hrs	alternate villages surveyed (bad weather)
<b>Total</b>	<b>8</b>		<b>6</b>

**Table 1. Comparison of King’s planned and actual itinerary.**

### **The field trip**

Detailed analysis of my two periods of fieldwork will be completed later in the year. I was assisted throughout this second period by Junne Cosmas, who I made primarily responsible for the household surveys in each village. I diverged from the schedule in two ways:

1. I substituted the corner at Matkomnai belonging to Demesuke, a Trust village, for Kasrenai, a non-Trust village, nominated by Burton [*this was a mistake by me, JB*]
2. I cut a planned trip to Komokpin partly because Public Affairs staff were about to start a garden survey in that area (the overlap might have altered the nature of discussions with villagers) and partly due to shortage of time;
3. I lost just over a day to a delayed Southwest Air flight and bad weather near Daru, causing me to omit a corner settlement at Kiunga and to take alternate villages in South Fly.

I visited six communities in all: the Demesuke corner at Matkomnai, the Boliwogam corner at Ok Ma 11, Wogam, Komovai, Deware and Parama.

## **Methods**

At all villages, I held a meeting with the village councillor (except Deware where he was absent) and his *komiti*. A complete village inventory was carried out at each place and a discussion of development issues and problems was held. At the same time, my assistant, Junne Cosmas, carried out a household survey to complement the information I had obtained from the inventory and discussions.

In all places the people were helpful, good natured and well informed. Discussions were sometimes frank, especially in regard to the quality of some of the Trust projects, but we encountered no resentment or hostility, directed either at us or at OTML (obviously there was plenty of criticism of both OTML and the Fly River Provincial Government—but a point of the visits was to discover how this was expressed.)

## *Objectives*

It was my hypothesis from two previous visits in connection with the project that sustainable economic development had not occurred in the villages of the Ok Tedi and Fly River systems. I designed the present survey to try to measure and quantify this in a consistent manner at points picked out from across the whole area. I would tend to think of the results from each of the six villages I did reach as a *case study* illustrative of the immediate vicinity of the village—because obviously they do not form a representative sample in the very strictest sense.

## **Itinerary**

### *Sunday 19 June*

Travel Townsville to Cairns,

### *Monday 20 June*

Travel Cairn to Tabubil via Hagen. Meeting at Environment; collected hire car and arrived Kiunga by evening.

### *Tuesday 21 June*

Kiunga to Wogam. Village inventory and household surveys. The village was only accessible by foot. People from this village had not been approached in relation to the damages claim against BHP.

### *Wednesday 22 June*

Morning spent arranging future travel in Kiunga, plus visits to Project Office, North Fly House, and rubber factory. Afternoon travelled to Matkomnai, met with Fr. Jean-Claude Béliand and visited Demesuke corner to arrange survey there the following day.

### *Thursday 23 June*

Demesuke corner, Matkomnai. Village inventory and household surveys. Only three families were found to be permanently staying at Demesuke village; the remainder live at

the highway corner. Rex Imu, the village spokesman and Trust Supervisor is active in the damages claim. A row broke out between him and Matkomnai villagers on our arrival. The latter resent the Demesuke corner settlers, and will not allow them to farm or carry out business at the corner, which is on their land. They also want to be a Trust village. Rex was aggressive towards the Matkomnai villagers, and they left, but there was clearly significant tension in the area. Rex claimed that the damages claim was on behalf of all Trust villages, but was vague on the method that might be used to share either damages awarded to them or legal costs.

Travel on to Tabubil. Afternoon visit to Ok Ma 11 to arrange visit for following day.

#### *Friday 24 June*

Boliwogan corner at Ok Ma 11. Village inventory and household surveys. as with Demesuke, most of the village is resident at the corner, but here local landowners allow them to make gardens and carry out business activities. These villagers had not been approached in relation to the damages claim. Visits to Environment, administrative arrangements and return to Kiunga by evening.

#### *Saturday 25 June*

Travel to Obo by Southwest Air, with usual delays from clapped out aircraft. Meeting with Obo fishery project manager. Made arrangements for survey next day.

#### *Sunday 26 June*

Up-river to Komovai. Village inventory and household surveys. This village had not attended the meeting to join in the damages claim, and had the least to say about environmental problems. Their main concerns were isolation and lack of any real development.

#### *Monday 27 June*

Whole day wasted waiting for Southwest, finally leaving for Kiunga in chopper. (The plane was constantly reported as 'just about to leave' otherwise we might have used the time better by doing surveys in Kaviananga, although the size of the village had originally decided me against that idea.)

#### *Tuesday 28 June*

Kiunga to Daru. Afternoon spent visiting Fly River Provincial Government and arranging dinghy hire for next two days.

#### *Wednesday 29 June*

The intention was to visit Severamabu and Madame on consecutive days, but owing to the late arrival and launching of the dinghy, plus the strong winds at seas, only Parama could be reached on the first day. Village inventory and household surveys, plus a very interesting meeting on sustainable development, the 'usefulness' of Trust projects, and the villagers' part in the damages claim.

The councillor and *komiti* said that they were in the claim as part of their membership of a Delta Association of villages, and that the present Administrator [*of the suspended FRPG*] had informed them that if the case was lost, their legal fees would be covered from the village SSG grants. They pointed out that the Administrator was a director of the law firm that had been instrumental in starting the case.

*Thursday 30 June*

Deware village. Village inventory and household surveys. The councillor was unfortunately absent, but this was a very under-developed village with no Community School and in which the *komiti* seemed singularly unaware of the outside world, including the damages claim. Most of the day was spent travelling to the village.

*Friday 1 July*

D. King to Port Moresby and J. Cosmas to Kiunga.

*Saturday 2 July*

Cairns, Townsville.

## WORK IN 1994 BY DAVID LAWRENCE

*Lawrence made two field trips during the year as his part of the study. The first, 25 March-5 April, was a familiarisation visit to allow him to get to grips with the nature of the project and to best devise the means of covering the huge area assigned to him: the Fly Delta and Daru roads area.*

*Like King, Lawrence was forced to confront the problem of how to satisfy the demands of method with fitting visits to his interview locations into a realistic timetable. But in this case, the question of sampling was not at issue; he was to attempt get to all the main villages in his area. His study was to combine basic social mapping with a schedule of open meetings at which the opinions of allcomers must be allowed representation. He faced several problems of method here.*

*Firstly, any lesser coverage might well be to cast too coarse a net over the unique circumstances, histories and interrelationships of particular villages. Secondly, failing to stop at a sufficient number of places in the Kiwai coastland might be to deprive significant numbers of people of the opportunity to have their say on issues of concern to them. (I have mentioned this elsewhere under the 'Criterion of Public Domain'.) Thirdly, his means of arrival at villages and his method of establishing primary contacts there would be critical to his success in eliciting useful information. For example, he could well have chosen the shelter of a chartered vessel and the ample comforts this would have afforded. But it was his judgment—a judgment with which I concurred at the time—that this would have ruined the best opportunities for him to learn from his informants, namely the opportunities created by accepting their hospitality, doing things their way, and staying in their villages even if only, perforce, overnight.*

*That Lawrence succeeded in ample measure is a tribute to his faith in this approach. Unfortunately, a severe bout of malaria was his most immediate reward for such methodological stubbornness (he fails to mention this in his summary). We may both be forced to revise our assessments of the best way to work in physically difficult areas in retrospect.*

*In respect of his findings, it is unfortunate to have to convey so few positive opinions about development in the South Fly. However, the upshot is a clear message for all parties to rethink the way rural administration and development, and village liaison are handled in the future.*

### **Methods**

I undertook two period of fieldwork in the Lower Fly region. A short trip was made, in March/April 1994, to assess the feasibility of the project in the region, to arrange for a boat crew to be available for the main field trip and to get details of field work requirement and availability of supplies. Subsequently, I requested equipment, fuel, a dinghy and two outboard motors to be supplied by OTML and made arrangements for these to be delivered to Daru. The second, main field trip was undertaken between 10 August and 9 September 1994. I made four trips through the estuary and visited approximately 24 villages. These will be detailed in the main report under the headings: Dudi (the villages from Parama to Somogi Island); Kiwai (villages on Aibinio and Kiwai Islands), and Manowetti (villages

along the northern coast from Wasua to Teapopo). I attempted, as much as possible, to stay overnight in villages and to hold a public meeting at night after people had returned from gardens, fishing or completed daily chores. All meetings were friendly and well attended, by both men and women of all ages.

## **Findings**

These can be summarised into two areas: environmental concerns and, development concerns.

### *Environmental concerns*

Concerns were expressed by all villagers about possible environmental changes to the river system. The Fly estuary is a vast area of low mud islands, mangrove, sago and nipa swamps and muddy river channels. It is a highly productive fishery area and the subsistence economy of the people involves fishing, processing sago, gardening and collecting.

Concerns over changes to the river system, and to gardens, are therefore of considerable importance and must be taken seriously regardless of their basis in fact. Village concerns relate to: local flooding, lack of fish in the river and swamps, damage to gardens by local flooding and muddy water, contaminated drinking water, diseased fish and garden foods, silting of river channels and the increase in the number of sandbanks and the introduction of non-native fish species (*Anabas* sp). All these problems have the ability to affect the village subsistence economy which is precarious. Village perception may not match environmental assessment by OTML and the National Government but this simply means that communication between the company, the Government and the people is urgently needed.

Village people complained that they were not informed about environmental changes and had not been approached by the OTML Environment Department. They had little faith in the OTML Liaison Office on Daru. No extension work is undertaken by the Department of Environment and Conservation based in Port Moresby. Officers from the Department of Primary Industry and the Fisheries Research office on Daru have occasionally visited the Fly estuary but they are ill informed about environmental matters and have only created further confusion among the villagers. English is widely spoken. There are a number of well educated, but unemployed, high school graduates in villages, and complex terms are understood. Communication must be established if villager concerns are to be answered.

### *Development concerns*

The Fly estuary is one of the poorest areas of Papua New Guinea. It has been long neglected by both colonial and national governments and remains economically and socially marginalised. Communication systems, telephones, radios etc, are almost non-existent, transportation is poor, services such as health, education and welfare are primitive and under resourced and village services, such as sanitation, water supply and garbage disposal and other basic needs are inadequate. Consequently there is a high incidence of disease and considerable out-migration to village 'corner' settlements in Daru.

There was a high level of consensus in villages about the inadequacy of the OTML Lower Ok Tedi/Fly River Development Trust not only in the type of development provided but also in the way in which development was given and the quality of infrastructure supplied.

Complaints about Trust buildings can be summarised as: poor quality materials, especially soft timbers; metal louvres, nails and bolts which rust; poor quality flooring, roofing and walls; foundations which are not embedded in concrete in soft, sandy soils and, culturally inappropriate designs (no front verandah and a single sloping roof rather than a gabled roof). Water tanks supplied by the Trust have also been criticised because they have earth foundations, are low to the ground and subject to contamination during flooding, have inner-linings which deteriorate, and leak. In addition, some of the taps supplied cannot be locked and therefore water can be stolen. Solar pumps are generally regarded as more successful although the batteries have to be replaced and the plastic pipes, laid on the ground, can be damaged or broken.

Contacts with Trust officers were also the subject of much comment. It is not appropriate for officers to fly into villages by helicopter, make a quick appraisal of village needs and then leave. This is considered particularly discourteous and much resented. Villagers also commented that many items requested are not supplied and they sometimes get buildings, or equipment such as fishing kits, that they do not want or cannot use.

The operation of the VDF (Village Development Fund) and the SSG (Special Support Grant) were also the subject of much complaint. The provision of VDF money raises considerable anger. The money is provided once a year and most always disbursed among villagers. This allocation to individuals must be made in cash so a long trip has to be made to the only bank in the area on Daru to cash the cheque. This is also dangerous. Payments to individuals are usually less than 20 kina and the money is quickly spent, usually on store goods. The SSG funds which were supplied to the Provincial Government to provide for village development schemes are available only by application from Daru. The complaint was that the money is usually given to Daru residents who claim affected area residency status. Applications from villages in the Fly estuary are usually not successful or the money given is totally inadequate for any meaningful development project. There is little or no feedback from the SSG Unit on Daru with the villages and no follow up on the project development.

Women's development issues are ignored. Women commented that the single most important items for women's economic development are sewing machines. These can be easily provided (cost is about 100-150 kina) but despite repeated requests from the Women's Fellowship groups in villages they are still not provided throughout the region.

## **Recommendations**

1. The operation of the Lower Ok Tedi/ Fly River Development Trust needs to be reviewed. Infrastructure provided by the Trust to villages in the Lower Fly is inadequate, poor in quality and culturally inappropriate. A complete review of the building program in the Lower Fly needs to be undertaken.
2. There is little real communication between the Trust officers and the villagers in the Lower Fly area. The Liaison officer on Daru may liaise effectively with local Government officers on Daru but does not communicate with the people in the affected area. Lines of communication between OTML and the village people need to be improved urgently.

3. The VDF and SSG programs are counterproductive. It would be better to see the latter program scrapped rather than continue to waste money or have it syphoned off through low level corruption.
4. Women's development should be taken seriously. The women's social networks are extensive and can be utilised for both education and public relations purposes.
5. Environmental information must be provided to villagers directly, it cannot be assumed that the Provincial or National Government bureaucracies are able to provide anything more than second-hand and inaccurate information. However, there is a high degree of distrust of OTML in the villages and it is certainly not recommended that Environment Department officers approach villages at the present time.

## WORK IN 1994 BY BUPAI TAPARI

*Budai Tapari has a much more personal familiarity with the problems of development in Western Province than any other member of the study team and a longer involvement with research there. He grew up and did his early schooling in Morehead District, later going on to the University of Papua New Guinea, where he graduated in Geography in 1976. In 1977, he and Richard Jackson were seconded to the National Planning Office to do six months research in the Kiunga District, which formed the basis of Jackson's 1977 Kiunga Development Study, one of the inception studies carried out prior to the opening of the Ok Tedi mine. During this period he and Jackson held public meetings at almost all Awin and Ningerum villages, driving out of Kiunga and walking along the route of the as yet unbuilt road beyond Ningerum. Tapari wrote up his own material for his honours subthesis at UPNG on the same subject.*

*A decade later as a lecturer in his old department he wrote up a desk study of his own area, entitled Problems of development in the Western Papuan Fringe: a case study of Morehead District, Western Province (UPNG, 1988), before eventually going on to successful PhD studies in New Zealand. It is this study that I asked him to mentally revise as he and I spent a week based at Suki, in the top righthand corner of the Morehead District, in August 1994.*

### **Personal impressions of socio-economic development in Suki**

This is a brief account of my personal impressions of socio-economic development in Suki. The presentation of this information comes from field observations and from informal discussions held with the residents of villages visited during the field trip.

My earlier study did not contain a very comprehensive analysis of development in the area during the 1980s upon which any detailed assessment of changes in the production and village economies can be made. However, there is certainly evidence to suggest that some form of rural development has taken place over the last decade. Especially in respect of the villagers' integration into the cash economy, this comes in the form of the number of small-scale business ventures. The more successful business enterprises are crocodile farming (a large operation by any village standards is located at Riki village) and the running of village trade stores. On the other hand, rubber tapping by block holders at Nakaku has been infrequent due to price fluctuations and also partly due to a lack of marketing arrangements.

Another source of revenue for some villagers is the hire of outboard motors and dinghies, although this activity is only minimal. It is largely dependent on government officials visiting the area, for example. Hire among villagers is impractical, as nearly all clans in the different villages own a motor and a dinghy or canoe. Movement of people and goods by water transport in the Suki area is not a major problem.

The small trade stores in Suki villages are some of the most successfully operated business enterprises in the Morehead District. My own experience suggests that many family trade stores, particularly in the Transfly and Bensbach Census Divisions, have not prospered due to some of the common problems I mentioned in my earlier study. Trade stores in Suki are usually well stocked, with a variety of basic consumer goods. Several factors contribute to their survival. Basic book-keeping is well maintained; transport services from urban centres,

notably Port Moresby, are reliable; and finally money circulating among family members is reinvested in to generate further capital.

Sources assisting the Suki area are as follows. Firstly, grants to the area have come from national and provincial government, locally represented in the shape of the Morehead Local government Council. Secondly, mission agencies have been particularly active in the provision of health services; at Suki, the Evangelical Church of Papua runs a health sub-centre. Thirdly, the Lower Ok Tedi-Fly River Development Trust includes all the Suki villages and has provided water supplies. Finally, local entrepreneurs, notably the crocodile skin buyers based at Riki and Sapuka, have also played an important role in bringing cash to the area.

While I have defined the prosperity of the Suki in terms of small scale business and cash income, and in the presence of modern physical infrastructure, such as solar-powered water pumps, less tangible aspects of development, associated with spiritual development and living in social harmony, should be mentioned as well. There is a very strong sense of community involvement in Suki. At the time of our stay at Gigwa (Suki) station, large clan meeting halls were under construction; this is to me a true reflection of a society living in harmony. By contrast, the continual relocation of villages in other parts of Morehead District is a result of land disputes between different clan groups. These also exist in Suki, but the major different is that villagers at Suki all work together as members of one big family and villages tend to be more congregated than is the case in some other parts of the District. A relevant point is that all Sukis are members of the Evangelical Church of Papua. The path which has been established towards achieving socio-economic prosperity in Suki in the 1990s is probably in large measure due to the role the church has played in developing the people spiritually, enabling them to benefit from government, and now OTML, efforts to provide material development.