

Changing Lives

Stories from the
Australia Papua New Guinea Incentive Fund
An AusAID Program
2000 – 2008

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Produced by: Birdwing Publishing, Port Moresby, Papua New Guinea

December 2008

ISBN 9980-937-55-6

National Library of Papua New Guinea

Acknowledgements

The Australia Papua New Guinea Incentive Fund would like to acknowledge the funded organisations and the many people throughout Papua New Guinea whose experiences have contributed to this book. Their stories have been generously shared and while there are too many people to name individually, we thank everyone for their interest in making this book a reality.



Men in Highlands traditional dress.



Mt Hagen community members at official opening of market.



Mr Bill Costello

Foreword by AusAID

The Australia-PNG Incentive Fund has played a major role in supporting well managed organisations and innovative activities in Papua New Guinea. These activities have delivered real development benefits for people all over the country.

From new hospital facilities in Kudjip through to a new bridge over the Kulu Dagi river in West New Britain, the APNGIF has made a significant impact on peoples' lives in a wide range of areas and for a wide range of reasons.

And it's not just about the direct benefits from these projects, it's also about people and organisations getting together to map out and manage their projects which has often resulted in communities working more closely together and PNG organisations significantly boosting their capacity, experience and development contribution.

These projects have also meant work for local contractors and employees and often included upskilling and training programs.

In one instance a local builder had the technical trade skills but limited business administration and management skills and so a training program was provided, strengthening that builder's ability to assist in PNGs ongoing development.

In another project several women were able to train and work in roles traditionally undertaken by men, in turn becoming great role models for other women interested in working in those industries.

And of course the benefits flowing from the construction of the new Mt Hagen markets are too many and varied to list here.

This book attempts to capture some of the spirit and energy from these projects and communicate the positive benefits and flow-on effects I have mentioned.

And if you need more proof take a look at the APNGIF website and the audio visual materials that are available there.

In total over K220 million has been provided to support 39 projects across 15 provinces from 2000 to 2008. I am pleased to advise that a further phase of the APNGIF will kick off in 2009. We expect that the APNGIF will continue to bring real benefits to Papua New Guineans and strengthen PNG organisations.

I hope that all who have the opportunity to look through this book get a good sense of what the APNGIF has achieved and how it has impacted on and improved the lives of many Papua New Guineans.

Bill Costello
Minister Counsellor
AusAID, Port Moresby

Foreword by the Government of Papua New Guinea

The APNGIF is an innovative program that has contributed significantly to the development goals of the Governments of PNG and Australia. It has supported and encouraged the effective participation of both the private and public sector organisations in PNG to contribute to PNGs development efforts.

The long-term development objective of the APNGIF was to encourage PNG organisations to be more effective and more efficient hence improving their overall performance. The APNGIF also provided an opportunity for new organisations and new initiatives to be funded under the Australian aid program.

Importantly, this program has improved the performance of these organisations.

There are significant program achievements which clearly reflect the priority areas in the MTDS 2005-2010 and the PNG-Australia Development Cooperation Strategy and other goals and priorities of both governments.

PNG is faced with a lot of development challenges, however it is important to acknowledge the many achievements this program has contributed. The APNGIF program has provided funding to build schools, hospitals, markets and roads & bridges all over PNG.

The APNGIF model to provide direct funding to organisations as originally intended is very well received and supported by the main stakeholders. The level of the APNGIF funding to organisations was appropriate and valued by the organisations. This assistance has led to significant achievements in the life of this program.

There are a lot of success stories from the organisations, communities and beneficiaries of the APNGIF program and this story book will bring it all together.

One important highlight in this story book is the level of participation of the communities which is very important for ownership and sustainability. Most communities involved in the APNGIF projects expressed satisfaction that they were contributing towards the development of their communities as well the country as a whole.

The provision of ongoing support through APNGIF has built the organisations' capacity effectively. This in itself is a success story of this program.

I am therefore pleased to support this story book for the APNGIF program.

Joseph Lelang
Secretary
Department of National Planning and Monitoring



Mr Joseph Lelang

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Caption:

INTRODUCTION

Background to the APNGIF

The Treaty on Development Cooperation between Papua New Guinea and Australia established the Incentive Fund (now the Australia Papua New Guinea Incentive Fund – APNGIF) in July 2000. The second phase of the APNGIF winds down in February 2009. A third phase is being planned between the governments of Australia and Papua New Guinea.

The APNGIF represented a new direction in Australian aid to PNG. Contestability was promoted by funding those organisations that made viable program proposals in priority development areas and had a track record of excellence in program management and financial accountability.

This allowed a wide range of organisations – churches, non-government organisations (NGOs), community benefit organisations – to access direct funding support, and to increase their contribution to the national development of PNG.



Dr James Kintwa - CEO Mt Hagen general hospital.

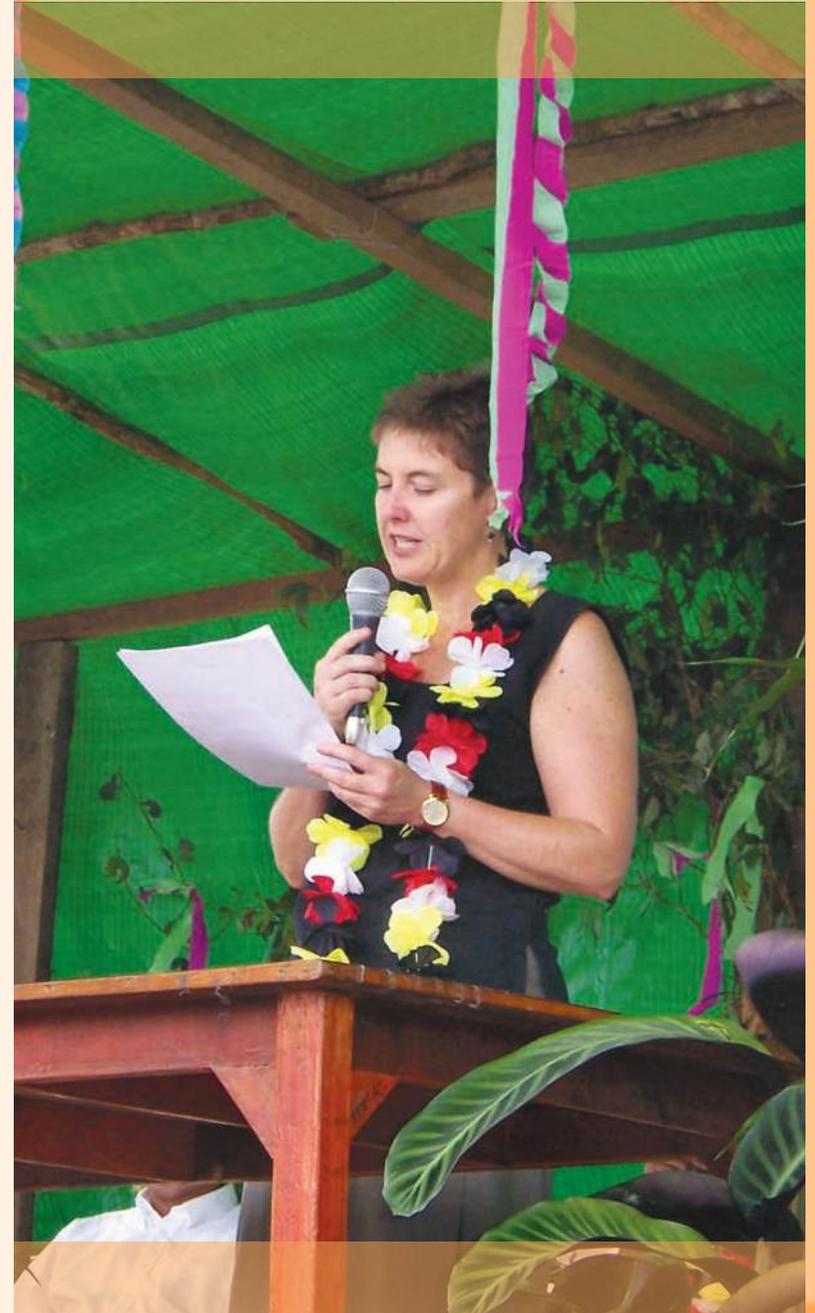
Goals of the APNGIF program

The APNGIF Goal was *'to support private and public sector organisations in PNG to participate in and contribute to national development in accord with the development policies of the PNG and Australian governments'*.

The long term development objective of the APNGIF was to encourage PNG organisations to be more effective. Proposals were funded on merits: organisations had to show efficiency and accountability and focused, quantifiable and sustainable impacts.

The activity was described as high risk and innovative at the time of design. However the independent review team found that of those completed program awards to May 2007, the vast majority were completed in line with the proposals. They also achieved the set performance indicators and showed positive expected and unexpected development outcomes.

The Fund has positively influenced an increase in PNG participation in the delivery and management of Australian aid in PNG. For instance 98% of program and financial managers were PNG nationals, some women, all large infrastructure programs were awarded to PNG-based companies and more than 100 small local contractors were provided with work, again with female participation in many construction activities.



Mt Hagen hospital official opening - Margaret Thomas, Minister Counsellor AusAID.

What has been accomplished?

Hospital wards, teachers' houses, classrooms, libraries, clinics, university facilities, computer laboratories, markets, wells and water systems, roads and a bridge have been built. Thousands of rural and remote people have gained skills and services never enjoyed before. Here are some figures:

- 155 new teachers' houses have been built and others renovated
- 132 new classrooms built and many more renovated
- 11 school libraries built and a number renovated
- 35 science and other specialist classrooms built and others renovated
- a large number of computer laboratories provided at schools and universities
- over 1000 new dormitory beds for schools and universities
- student numbers have escalated in primary and high schools with APNGIF upgrading: well over 700 new places for grades 11 and 12 have been created in co-educational schools
- over 600 new places for young women were created in upper secondary grades in three of the four all-girls schools and well above average numbers are now qualifying for tertiary education
- in 2008, 160 extra places were provided to young people who could not otherwise pursue their education, allowing them access to basic and technical training in Port Moresby
- 3 universities have had major upgrades as has the PNG Maritime College which is now able to offer Master and Engineering Class 1 studies
- 280 teachers from four provinces have been trained to use conservation education developed under an APNGIF project: 850 sets of conservation materials have been produced and the course materials will soon be used in a degree course
- over 200 water systems have been installed and communities are reporting a drop in water borne diseases and better village health
- more than 1000 latrines have been built



School grounds - Notre Dame High.



Local produce and sellers at Mt Hagen market.

- well over 2500 people have had literacy classes and 106 literacy learning centres have been established in rural or remote communities and more than 260 literacy teachers trained
- over 10,000 people have had training in improved agriculture methods
- over 700 people have had hygiene training and a similar number has had skills training or training in economic opportunities
- two beautifully designed markets have been built in Paiam and Mt Hagen, providing more and new opportunities for employment
- thousands more hectares of oil palms have been planted in West New Britain and Oro because of new feeder roads and a bridge connecting them to markets
- the Government of PNG targets for trainee nurses have been exceeded
- five major hospitals have had extensive upgrades including new operating theatres, maternity, general and isolation wards and specialists services
- 40 or more health posts/clinics have been built or upgraded
- hundreds of health workers have been trained in birthing, immunisation and other procedures
- PNGs leading Policy Research Institute can more easily support government thinking with critical information and advice, and
- after successfully completing an APNGIF program, organisations have been able to demonstrate effectiveness and successfully apply for grants from other funding agencies.



Woman farmer attending her crops in Western Highlands.

Overview of expenditure

The minimum award was K1 million and the maximum was K7.5 million in total. The ceiling of K7.5 million was set after several years and after experience showed that a lower ceiling would be more manageable for the funded organisations. Awards could be expanded over a number of years.

Thirty nine programs were approved and funded over the life of the APNGIF. A small number of organisations were awarded funding for two programs.

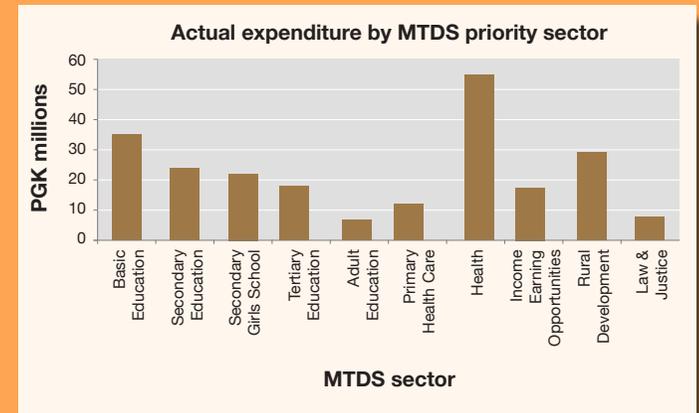
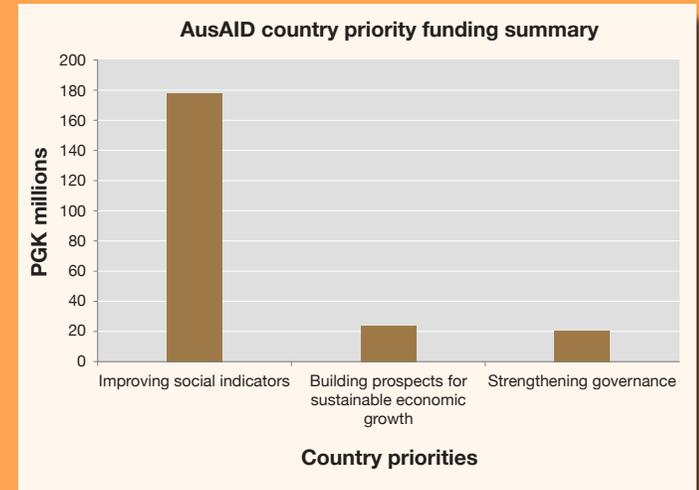
The total amount of funding approved was K261 million, equating to AUD110 million. Of this K240.3 million was actually spent by the funded organisations.

Where has the money been spent?

Fifteen provinces have benefited from APNGIF funding. The National Capital District (NCD) was the province that benefited the most (K46.6 million). Madang accrued K33.4 million, Western Highlands K31 million and East New Britain K20.8 million. Other provinces received between K20 million (Simbu) and K1 million (Enga).

Funding has been spread across a number of sectors related to the spending priorities identified in PNGs Medium Term Development Strategy (MTDS) of 2000–2005 and 2005–2010.

Two thirds of the total funding has gone to education, although this amount has been spread across basic education, secondary schools and tertiary and adult education. This split across the levels of education can be seen in the graph of spending by MTDS sector.



Actual spending by province (31/12/2008)



THE STORIES

Sector by sector

Stories in this book are presented in sectors as per the Government of Papua New Guinea's Medium Term Development Strategy.

Although the APNGIF program was not structured or planned by sector, it is still a convenient way to present these stories.

Some programs do not have stories in this book. Details of these are given in the Appendices.

Sectors

1. Promotion of Income
2. Rural Development
3. Health
4. Gender Development
5. Education



Guest speakers at the official opening of the Mt Hagen hospital. From left – Minister for Health, Minister Counsellor AusAID and Chairman of hospital board.

Some financial details are approximate as for the latest programs, final spending is estimated rather than actual. Actual spending can be slightly more or less than the approved funding.



Plantation workers housing - NBPOL West New Britain.



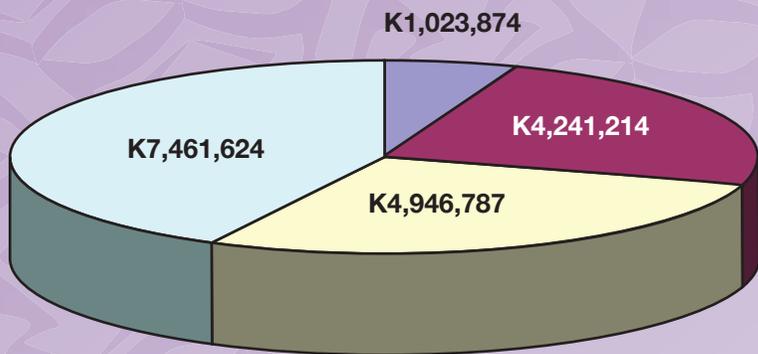
Promotion of Income

Promotion of Income

Many Papua New Guineans live in poverty. The promotion of income earning opportunities is an important expenditure priority in the PNG MTDS 2005-2010. Even small increases in cash incomes in largely subsistence communities can provide help to improve diets, hygiene, food, security and health.

The APNGIF funded four programs directly related to this goal, two markets, a system of feeder roads and a bridge. Other funded programs have included income generation in a range of activities. The activities were mainly at the local level and encouraged communities to use their own resources and skills to achieve economic growth.

The total spending on programs relating to the promotion of income was K17,673,500.



- Paiam Town Market
- Oil Palm Industry Corporation
- Kulu-Dagi River Bridge
- Mt Hagen Market



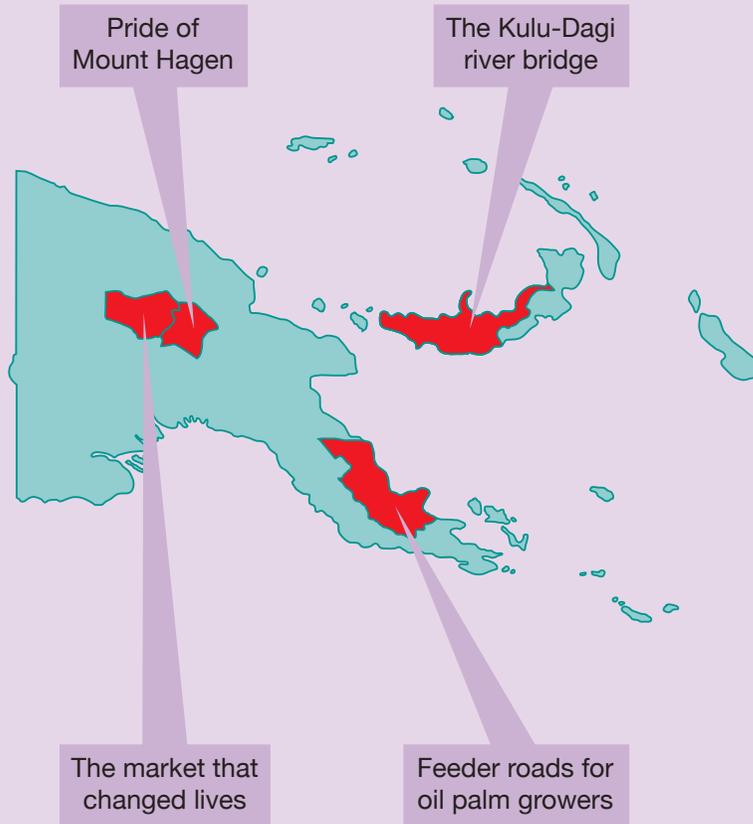
Paiam market - Enga Province.



Kulu-Dagi river bridge - West New Britain Province.



Local produce and vendors at Mt Hagen market - Western Highlands Province.



Stories on Promotion of Income in this book

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Pride of Mount Hagen

'Before, I never worked. I sat around with my relatives or roamed around like a rascal. Now I help people carry their bags into the new market. Now I sleep well, I have a new life. I wear proper trousers and can see that my family has money every day'.



Mt Hagen women dancers.

The previous Mt Hagen market was described in a proposal for funding as *'extremely overcrowded with sellers sitting on the ground and produce easily spoilt by dust, sun and rain'*. Nevertheless about 1000 sellers, 85% of them women, used the market space daily.



A market redevelopment was proposed by the Mt Hagen Local Level Government with Wamp Nga Holdings as the management company. The Program objective was, *'To provide market facilities and training to develop local sustainable economic growth by encouraging and increasing local agricultural and handicraft production and sales to the benefit of rural producers and urban consumers, particularly women who play a key role in this sector'*.

The Program had a target of up to 2000 undercover selling spaces with tables and benches, an ablution block, a wash area for the produce, and good security.

Even during construction the market made an impact, with the contractor providing work and an income for a large number of local people. The management company is proud of this. *'The K7.5 million mostly stayed in Mt Hagen. At one time the contractor was employing up to 300 people. That is a lot of employment'*.



Newly completed benches and seating.

As the building progressed, better drainage and lighting and a health clinic were included in the K7.5 million facility. The result is a market which is the pride of Mt Hagen and of the Highlands. A seller at the market said, *'The market has improved the image of the city. It has also become the food bowl for people within and outside of Hagen. Because of such a fantastic facility, we take pride in the market and the town and want to maintain the good image'*.

The market management carefully controls the environment to ensure it is always clean and fresh. Permanent staff include market management, security staff, gatekeepers, cleaners and attendants in the toilets.

The market was started in late 2004 and was formerly opened on 6 December 2006. It was a huge celebration!



Traditional dancers on the opening day of the new market.

A market of opportunities

Even the management company is surprised at the extent of jobs and opportunities that the new market has created. Growers are selling more and people who were previously unemployed are now earning a daily income. *'The unexpected thing is the employment opportunities for a range of people. Originally it was the farmers selling their produce. Now it's retailers. The market has taken the fresh produce industry to a new level. There has been an impact on the lives of the people in Hagen, benefits flowing out to households and at the individual level'*.

On the busier days of the week there are over 1500 benches filled with produce. Sellers are mostly women. Many are urban women from Mt Hagen who have not had a job before. Now they buy bags of produce wholesale from the local farmers and become 'retailers'.

PROGRAM DETAILS

Name: Market Redevelopment Program

Number: 031

Proponent: Mt Hagen Local Level Government with Wamp Nga Holdings

Sector: Promotion of Income

Location: Mt Hagen, Western Highlands Province

Duration: November 2004 to December 2006

Expenditure: K7,461,624

Program description: To provide market facilities and training.

New approaches to farming

The market management did not expect the wholesaling of farm produce to expand as quickly as it has. *'The wholesaling section is becoming so significant, we are running out of space and they are spilling out onto the footpath. Maybe 40% or more of sellers in the market are selling food they bought from wholesalers'*.

As a consequence of the market, farmers are looking at new ways of doing things. There is a move out of family-based gardens into larger commercial gardens with hired labour. A couple of villages are considering a village cooperative as a way of diversifying without competing against others in their community. More land is going into gardens and new crops are slowly being introduced. *'There's been a big impact on farmers. They used to be subsistence farmers, but they are becoming commercial. Growers are starting to look at village cooperatives, and at new concepts, for example, developing spices. Fewer farmers are selling directly at the market, they now only have time to grow and garden'*.



Bags of produce for sale to 'retailers'.

Getting kids off the street

Street kids in Mt Hagen have benefited from the opportunity to earn a living for the first time. They show initiative by waiting for the farmers to bring in their produce and help unload and cart the bags into the market. These 'taxi boys' are proud of their role and very active in offering their services. The manager of the market said, *'Now there are 'taxi boys' helping farmers with their bags and carrying bags in the market, they are earning K10 a day or more, these were street kids and now they have work'*.

John, a 'taxi boy' of fifteen, tells how his life has changed completely and he is now a family breadwinner. *'Before, I never worked. I sat around with my relatives or roamed around like a rascal. I did not earn money at the old market. Now I help people carry their bags into the new market. Now I sleep well, I have a new life. I wear proper trousers and can see that my family has money every day. I can give money to my brothers when they come from the village, I can pay their bus fare and give them rice to take back. I am very happy, and we thank the Incentive Fund'*.



A taxi boy at work.

Identifying the niches

Market bags

Some 'niche' markets have evolved. The market banned plastic bags and now there are a number of people selling large lute bags to the hundreds of buyers. It is a feature of the planes going out of Mt Hagen – half of the check-in luggage comprises lute sacks of fresh produce! One woman describes how she has taken advantage of this to create a job for herself. *'We have a new industry, sewing market bags. I buy bags from the people who bring them in from Lae. I sew them myself and bring them to the market to sell. I usually sell them for K2 for a big bag and K1 for a small one. I get good money. If I make a profit of K100, I do food shopping for about K20 and out of the rest I can pay school fees, buy soap and rice'*.

Import and export

Sellers are bringing in crops from other provinces that don't grow easily in the Highlands. The market now provides the wherewithal for a much more diverse diet of fresh fruit and vegetables.



Selling lute sacks.

Early in the life of the market, John identified coconuts as a niche product and moved from selling chickens to ‘importing’ coconuts from Madang on the coast. He is one of many sellers who bring non-local produce into the market, or buy at the market to ‘export’ to other towns or provinces. John goes by PMV (small bus) to buy stock and ‘buses’ back to Mt Hagen. *‘Before I was selling chickens but when they opened this market I saw that no-one was selling coconuts, so with the money from the chickens I bought coconuts. I go to Madang in the PMV and bring the coconuts back. The coastal people love coconuts and now the people of Western Highlands are interested’.* This has been a successful venture for him.

Michael, another importer, brings peanuts from Markham in Morobe Province. He is delighted with the market and is making enough money to pay school fees, buy soap and cooking oil. He says he is better off than with the old market.

‘We have security fencing and everything we need inside the market. That’s why I find it easy to make money. Mi hamamas na tankim helpim bilong Australian Government. Olpela maket i no gutpela tumas, nogat banis sikuriti siseam, nau em i moa gutpela stret na mipela hamamas tru’. [I am very happy and I really appreciate the help of the Australian Government. The old market was not that good, no security etc and it was hard for us to make ways of earning a living. But now we are very happy.]

Still other people buy from the wholesalers at the market, and take bags of produce back to smaller markets spread throughout the Highlands or as far away as Porgera and Port Moresby. The Paiam market, built like the Mt Hagen market by AusAID funding through the APNGIF, sells a range of fresh vegetables brought in from Mt Hagen. People in many communities are now enjoying a greatly improved supply of produce, and are healthier for it.

Market facilities

All the sellers describe the conditions within the new market as excellent. Kathy, a grower from Kerowagi who sells wholesale to Mt Hagen women and also sells her own produce at the market, describes some of the difficulties she used to encounter. *‘We faced a lot of problems in the old market. There was no shelter and we got wet when it rained. Even when the sun was too hot we had to sit there and continue our selling. We didn’t earn good money. But now we are happy because we have proper places to sit and we no longer sit under the sun or get washed by the rain. I earn good money’.*

Pauline, a widow who sells pineapples, is certain the new market benefits her. She is secure, comfortable and no longer struggles to sell her produce, *‘In the old market, there was no proper toilet. It was not nice there. We tried to sell our food crops quickly and go home. We made our prices cheap so we could do this, we didn’t sell properly. But now shelter is provided, water is there for us and we are safe from the rain. I sell at this market so that my son can pay his school fees and we can buy soap, kerosene and all the things for the house. I am indeed getting a good benefit from the market’.*

Women sellers

The Provincial Council of Women say they are happy at the new opportunities for many more women to earn an income. They talked about the new group of urban retailers as key beneficiaries. *‘The new group of women that have benefited from the market are the non-grower vendor group that has emerged. These are largely women from the settlements who have not had an income-earning opportunity before’.*

They are also delighted that the market is clean. *‘The food is sold from clean benches rather than on the ground. Food lasts longer and you hardly ever see any bad food in the market now’.*

The services provided at the market certainly benefit women. In particular the health clinic which was added to the market design once construction had started is a popular and important resource. The clinic provides informal teaching on hygiene and HIV/AIDS as well as basic help for a large range of minor conditions. *‘On Friday we saw 45 people, everything from headaches, fever, asthma, gastro-enteritis and infections’.* Without the clinic, sellers would have to give up a day’s earnings to go up to the hospital for attention. The clinic is open 6 days a week, and sees between 40-60 people a day. A seller describes her experience. *‘We have a Haus Sik now. I have been there plenty of times already. I can pay for it, it is K2 for a liklik sik and K20 for a bigpela sik’.*

Pride of the community

There is an obvious sense of pride among market management, sellers and buyers. There are no betel juice stains, the marketplace is clean, and the sellers look happy. Taxi boys say, *‘We show respect for this market’.* And an elderly woman seller said, *‘Now in this new market, we are proud. The new market came and even the dress of the people in the market changed. We are very happy here’.*

The Kulu-Dagi river bridge program

‘When the bridge was constructed we moved to this area and now we have an income, which is small at the moment, but when the blocks become fully developed our income will increase significantly’.



Kulu bridge buttress.

In 1997–1998 the people of the Kulu-Dagi Inland Cove area suffered hardships due to a drop in income from timber royalties. Development of cocoa, copra and oil palm industries were explored. Cocoa was unsuitable due to high rainfall and low yield and the price of copra was declining. Oil palm with its relatively high market price and excellent yield in West New Britain was seen as the solution.



The New Britain Palm Oil Limited (NBPOL) proposed to build a permanent bridge over the Kulu-Dagi river, providing access to the west side of the river and opening up land for the industry.

The proposal to the Incentive Fund said, *'This public infrastructure will assist access to the Kulu-Dagi river basin for further economic development, in particular 4,000 - 6,000 hectares of oil palm as nucleus estates for New Britain Palm Oil Limited and a further 1,000 - 1500 hectares for village oil palm growers'*.

The new bridge would also give local communities access to health and other services that otherwise took a sometimes dangerous journey along the coast, including an arduous four hours at sea.

More oil palms and a new community

The bridge was completed in April 2002 at a cost of K4.5 million. A Silovuti Highway project report (December 2006) recorded an increase in hectares planted, from 22,000 hectares in 1997 to 27,208 in December 2006.

By early 2007 approximately 4,000 hectares of estates and 150 village oil palm blocks were fully established and producing fruit. There are plans for another 20,000 hectares south and west of the Silovuti township.



A new plantation springing up.

There has been a considerable increase in the amount of money going into the community in the form of wages paid by NBPOL.

Growth in wages paid: Two plantations 2002-2006

Plantation	2002	2003	2004	2005	2006
Daliavu	74,969	79,210	104,910	102,216	113,162
Sapuri	12,319	27,610	75,868	75,868	79,147
Total	87,288	106,820	158,432	178,084	192,309

Source: NBPOL records.

A new town

The NBPOL have built a new township – Sapuri – for some of the 500-600 workers filling jobs created by the expansion. Other settlements have sprung up along the new road corridor. Most settlers have relocated from areas affected by volcanic activity in the Balu Witu region, or have come from the Highlands or Morobe. Accepted and given land by the local people, they are now growing oil palms. An old local resident says, *'Highlands and Morobe people came and stayed with us, when they come and ask us we feel sorry and give them ground enough for them to plant oil palms and they live with us'*.

Social outcomes

The benefits have been much greater than hectares planted and increased income for the surrounding communities. Several definite social outcomes have been identified, in health, education, resettlement, community income and women's lives.

PROGRAM DETAILS

Name: Kulu-Dagi River Bridge Program

Number: 006

Proponent: New Britain Palm Oil Limited (NBPOL)

Sector: Promotion of Income

Location: Kulu-Dagi Inland Cove area, West New Britain Province

Duration: January 2001 to April 2002

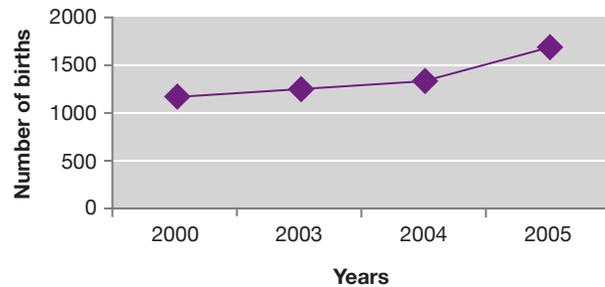
Expenditure: K4,541,255

Program description: Construction of Kulu-Dagi river bridge.

Health

Health services are now coming into the area west of the river and the number of women able to cross the bridge and go by road to Kimbe for hospital treatment and ante-natal care, is rising.

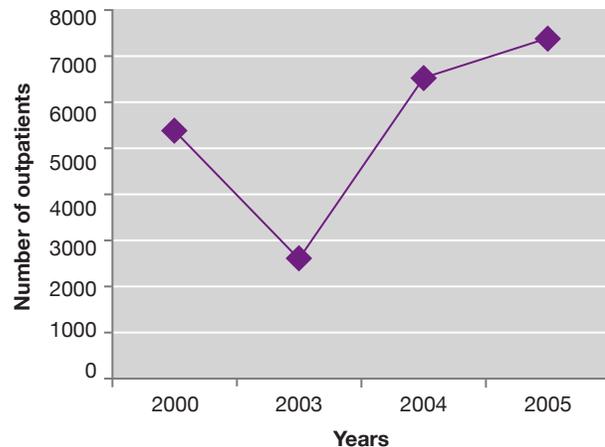
Attended births at Kimbe Hospital, 2000-2005



Source: Kimbe Hospital data.

Statistics gathered in 2006 also show increases in the number of outpatients who attend Kimbe Hospital.

Outpatients at Kimbe Hospital, 2000-2005



Source: Kimbe Hospital data.

During an evaluation a year after the bridge was opened, the Provincial Health authorities said, *'The existence of the bridge has had an influence on the new Provincial Health Strategy, with programs now being undertaken in previously inaccessible areas. Since the bridge opened, we have extended our outreach services. New monthly clinics are being held at Kulu-Dagi, Ismin, and Kandoka. The clinics are undertaking specific programs to address immunisation, maternal health issues and general health promotion. People are attending the clinics from the outlying areas, approximately 2000 people every month. The health outreach program is also delivering medical supplies to aid posts. There is better access to the Kimbe Hospital'*.



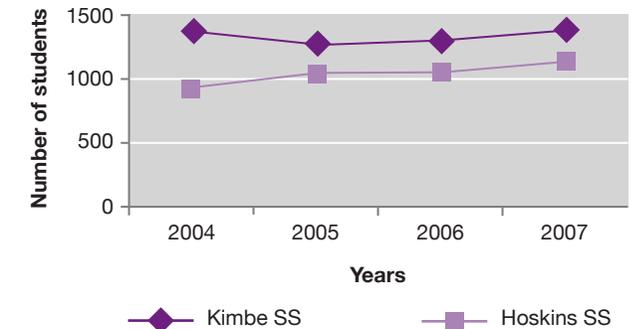
Opening day for the Kulu-Dagi bridge.

A local Elder said, *'Before, it was very hard for us. Now the bridge is built and it helps the PMV, (small bus) come and help us to travel to town, like going to hospital. Before, we had to cross the river to go. Sick people said "we'll stay and die". Now the PMV comes so we can use it to go to town to get medicine'*.

Education

The Provincial Education Advisor noted that the growing population following the bridge construction increased the number of students at Haella community school. With the allocation of four additional teachers, the school has been upgraded from level four to level five primary school. In addition, there are now elementary schools at Kulu-Dagi, and a primary school is being considered. A new school is proposed for Siluviti and enrolments at Kimbe and Hoskins secondary schools are rising.

Growth in secondary school enrolments 2004-2007



Source: KHS and HSS.

'The bridge brought education into the area and teachers come and teach our children'.

Changing lives

Many people now growing oil palms in the area made accessible by the bridge were originally nomadic tribesmen or people who had to relocate following volcanic activity in the Bali-Witu area. Their lives have changed dramatically and quickly. Some are now landowners, others work as block holders. They are establishing permanent houses and already have a school building.



A new settler.

The West New Britain Provincial Government health outreach program provides the settlers with medical support and advice on a monthly basis. Local landowners who are not planting are benefiting from renting their land to the migrants.

'I have rented some of my land to migrant block holders. Currently I rent 88 blocks, each block being 2 hectares. A further 40 blocks are available for rent. My clan is now earning income from renting our land to local people or migrants to the area, who wish to grow oil palm'.

Income for women

In 2007 the Provincial Council of Women confirmed that the bridge has improved lives for women from the west side of the river. *'Health services and education are possible for people previously excluded. More women are generating incomes. Local women are becoming more economically independent through the development of various initiatives'.*

The women work within the oil palm industry through the *'Mama Lus Prut Card'* program introduced by NBPOL. This provides women with direct income from the sale of loose fruit, paid into their own accounts. Other income is earned from gardening. Women from west of the bridge are now easily able to sell their surplus garden produce at the Kimbe town market.

Bridges bring benefits

It is clear that a single intervention such as a bridge can have a wide-ranging impact on any community. Health, education and business all improve, and the positive social impact, especially for women, makes this program a good investment for the future.



Kulu bridge from downstream.



Foot traffic crossing the bridge.

The market that changed lives

'There is a different atmosphere in the town. People sense that there is now an opportunity there, something to aim for ... now they have seen that they have to do something so they can have a comfortable life, and the market has provided that opportunity. There is now no reason why we should say 'I cannot support myself'.



The Paiam central market, a striking construction, was opened in January 2002.

In 1984 viable gold deposits were identified in the Porgera Valley in Enga Province. Mining activity and associated development transformed the valley. Compensation and royalty payments imposed changes to the social and economic environment. Whole communities were relocated, there were large cash payouts to some clans and the population of some districts escalated. There was social and economic upheaval and increases in crime and violence, alcohol abuse and tribal fighting. The negative impacts of mine development were felt particularly by women.



In late 2001, the APNGIF granted K1 million to the Porgera Development Company (PDC) to build a market in Paiam which would *'Promote sustainable economic growth in rural areas by encouraging and increasing local agricultural and handicraft production and sales, and promote unity through an environment for people to meet each other, socialise and exchange ideas and gifts'*.

Two PDC staff members talked about the lasting effects of the market. They were not involved in the APNGIF Program, but they had this to say.

'It's the centre of economic activities in the town. They come and buy and exchange ideas. The income they get now has changed lives'.

'Now we have sellers all the way from Mt Hagen, they come to sell their vegetables. A lot of the greens are from the Hagen market. But people around here now grow broccoli and other things they didn't before, like cauliflower and all that. The key thing is that if there was no Hagen market we wouldn't have any variety, so everybody is winning'.

Changing attitudes

As was intended, the market has provided more than a place to generate income. It has helped clans to reconcile and live together.

'Attitudes have been changing day by day because the market has also provided education. For instance if they are at the market they have to learn Tok Pisin.

Before the market was built, there was no proper market for anyone. There was a small market at Porgera station but the people of Paiam wouldn't go there because of tribal fights, they would stay in their area.

The new market has reduced that tension. It is a place for people of all walks of life. Porgera station people are not afraid any more, even people of Paiam are not afraid to go to the Porgera station now, so that's one of the things, the intentions of the market, that has been achieved.

There are people of all backgrounds coming here, people who work at the hospital or mines, or teach at the school, and they are all interacting with other people at the market. That's the way they make a friendship now, where you learn to communicate with the other person and speak the same language. And if you interact with people, you get some new language and you also get some new ideas'.

Women

Women were especially hard-hit by some negative aspects of mine development such as resettlement or unrest when some clans missed out on royalties or cash payments to resettle. The market has provided a safe and clean environment for women who, with training, are now growing in confidence about earning their own income.

'Paiam is a better place for having the market, for women especially and for those who have been denied employment in the past. It's really made a difference. When the market came into existence the Porgera Development Company gave training in baking, even sewing. So when they started sewing they could sell at the market. Now there are many Porgera women getting into sewing, especially meri blouses, they can sustain themselves. And from that sewing they have also started to look after and sell poultry. The market has helped them a lot'.

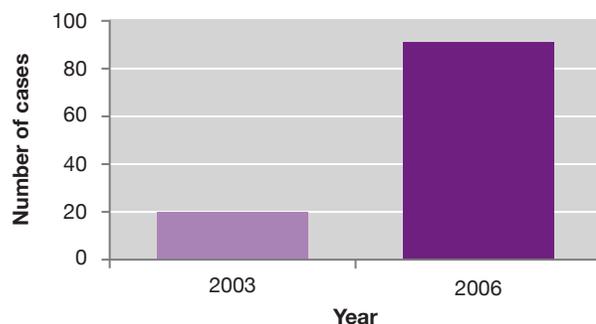
PROGRAM DETAILS

Name: Paiam Market Development Program
Number: 004
Proponent: Paiam Development Company (PDC)
Sector: Promotion of Income
Location: Paiam Township, Enga Province
Duration: November, 2001 to January 2002
Expenditure: K1,017,370
Program description: Construction of Paiam market.

Seller income

Most sellers are women. Income for stall-holders appears to have increased four-fold, (from an average of K20 identified in a 2003 evaluation to an average of over K80 a day in November 2006). The data is qualitative, (data is not kept consistently) but it is a significant increase.

Estimated average daily income for bench and informal sellers



Source: PDC staff interviews.

A representative of a strong provincial women's group has said that as women start to have an independent income, family circumstances begin to improve. Husbands are said to have increased their appreciation of their wife's efforts.

'Husbands have also noticed these changes in their woman and the changes in their homes. The kids are wearing good clothes, they are seeing the benefits of savings, they can buy things now, they can supplement their food. The women can help their husbands to afford a good house now, better materials. It's quite noticeable that there are better houses'.

People say that as women gain an income they also gain an increased optimism about the future.

'There is a different atmosphere in the town. There is now something to aim for, trying to be independent. Now people have seen that they have to do something so they can have a comfortable life, and the market has provided that opportunity. There is now no reason to say 'I can not support myself'.

More children in school

School fees are being paid. Education opportunities for children are improving as a result of more money in the family. A representative of the Porgera Local Level Government acknowledges the impact on school attendance of the new market.

'The main benefit is income for people, and the ability to pay for things like school fees. For instance the stationery people at the market, it is their first time in business, it is an ex-teacher who was retrenched, he has 11 children and with no job had no school fees. Now all the children are in school'.

Markets change lives

Papua New Guinea is a rural, agricultural society. The sale and distribution of food centres around market places, large and small. The APNGIF-funded Paiam market has made a big and positive impact on the social and economic fabric of the Pogera Valley.



Paiam market gates under construction.



View of the central grassed area of the market.



A birds eye view of the market at completion.

Feeder roads for oil palm growers

- a program which did not go smoothly

‘The livelihood of the people is changing, there is power going into some oil palm areas, block holders are starting to get TV, generators, they are starting to build good houses’.



A collection point for fruit.

In 1997, a small-holder block development of the Popondetta/Oro Nucleus Estate Scheme commenced with assistance from the World Bank. By 1998 about 5,500 hectares were planted on some 1,380 blocks and by 2000 over 13,000 hectares were in oil palms.

When in early 2002 the Oil Palm Industry Corporation (OPIC) presented a proposal to the APNGIF, about 190 km of roads were still needed by the growers.



The objective of the proposed program was, ‘To complete development of an access road network with associated bridges to enable vehicle access to smallholder blocks for collection of fresh fruit bunches for delivery to the processing mill’.

It was to be a huge program with a budget of around K19 million approved prior to the imposition of a K7.5 million ceiling. It included finishing roads that were originally in a World Bank program and building new and upgrading other roads in the area. These ‘feeder’ roads were widely dispersed and ranged in length from 200 metres to nearly 7km. They would give local smallholders access to fruit collection points.

The unfinished World Bank program had initially used a head contractor model. When work went slowly, this was replaced by a model where OPIC managed several local contractors directly. This approach was more successful and completed a larger number of kilometers than under the head contractor model.

The APNGIF program finally started in November 2004, two years after the IFA was signed. It was to be run in three components.

Component 1: 89.1km of new or upgraded road.

Component 2: 88km of new road.

Component 3: 18km in three incomplete contracts from the previously funded World Bank program.



Mudupena men taking fruit to a collection point the hard way.

For a number of reasons the head contractor approach was selected for Components 1 and 2 of the APNGIF program. It was a debatable choice. There were many barriers to overcome, quite apart from the weather. After the initial disagreement about the contractor model, mobilisation was slow. There were logistical problems and delays in submitting the contractor’s Environmental Management Plan. Fuel prices and the cost of steel for culverts escalated during the period. Relationships between the head contractor and subcontractors were difficult and eventuated in sub-contractors ‘downing tools’.

Eventually time ran out for the Program and by the end of September 2006 only 55km (62%) of Component 1 roads were completed at a cost of K5 million.

Component 3 was completed on time and to budget but no Component 2 work had commenced. Through close monitoring, the cost per kilometer of the completed roads was very close to the original estimates.



Etere road under construction July 2005.

PROGRAM DETAILS

Name: Roads and Bridges Program

Number: 019

Proponent: Oil Palm Industry Corporation (OPIC)

Sector: Rural Development

Location: Popondetta, Oro Province

Duration: November 2002 to April 2007

Expenditure: K4,946,787

Program description: Construction of roads and bridges.

Growers are disappointed

The growers who missed out on promised feeder roads are disappointed and angry. They say, 'A few block holders are close to the main road but most are situated at the back of the area and some have to push the wheelbarrow of fruit for 7 or 8 kilometres to the collection point. If we had feeder roads we could harvest more fruit and improve our earnings. We may be able to start other small businesses and it would make it easier to pay school fees and medical expenses as well as repaying the company loans'. Most block holders have loans for stock, fertilisers etc, and without a steady income these are hard to repay.

In Boru Sorape the local elementary school and the aid post have both closed because the staff are not being paid. Growers there believe that if they had feeder roads, there would be more money in the area to overcome this.



Completed section of Igora main road.

In Inota, where there is a road, the block-holders believe their loans will be paid off quickly and they will concentrate on upgrading their housing.

Mama Lus Prut

In spite of being unfinished the Program has provided positive impacts. In the 'Mama Lus Prut' scheme for instance, women can earn between K200 and K300 a fortnight. They work very hard for this, carrying the heavy loose fruit in bilums and bags. 'It takes us a week to harvest and get it up to the road, we carry about a ton up'.

Mama Lus Prut was first introduced in West New Britain when women who could have been collecting loose fruit, preferred to stick with their gardening activities to make money. This was because they did not get paid separately from the men. Once a Mama Lus Prut card was developed and women were paid directly, more and more loose fruit was collected.



A raft as an alternative way of getting fruit to a collection point.

Increase in smallholder and Mama Lus Prut FFB tonnage and gross income

	FFB tonnes	Per tonne p.a
Smallholder		
2004	141,263.34	K159.27
2005	132,067.34	K131.81
2006	150,939.90	K83.11
2007 to 31 July	113,727.60	K103.57
Mama Lus Prut		
2004	28,728.52	K159.27
2005	42,432.98	K131.81
2006	47,101.31	K83.11
2007 to 31 July	33,185.72	K103.57

Source: OPIC from CTP Cargill's Higaturu oil palm factory (Popondetta).

Mama Lus Prut income is estimated as ranging between K200 to K800 a fortnight, shared between the women. In some villages women take turns receiving a share. 'Four women one fortnight, four the next', so that everyone has a monthly income. A Provincial Women's Advisor said, 'The Mama Lus Prut impact can be seen in the kitchens, the women are not waiting for the men to come home and share their money'.

A bank officer in Popondetta confirmed the direct payment to women. 'In April we wrote 2188 cheques for the Mamas, and we have 1120 Mama Lus Prut accounts'.

The Popondetta Bank representative estimates the MLF share of the monthly oil palm fruit tonnage is around 34%. 'In April over 16 thousand tons were brought in and Mama Lus Prut delivered 34 percent of this. In the last four months the total has been over 62 thousand tons and their part has been more than 21 thousand tons'.

Overall the women are delighted with their income, saying, 'The feeder roads have really helped us, we have benefited very well'.

With extra income many women are becoming entrepreneurs. A Grower Committee member said.

'They still produce the garden products and they are willing to work hard to improve their lifestyle and that of their children. Many more women are starting small businesses, selling cooked food or vegetables along the highway and side roads'.

There are other positive impacts

The Provincial Administration has pointed to a number of unexpected and positive outcomes:

- there are more PMVs on the roads and more PMV routes
- people have easier and quicker access to Popondetta town and the services available there
- many more people can afford to pay for medical treatment and enjoy better health
- parents are able to enroll their children and pay school fees
- with cash in hand, many people are starting small businesses, *'Such as vanilla, rice and even a fish farm. A lot is their own initiative'*
- there is a decrease in crime and violence as people are engaged in planting and harvesting for which they receive an income, possibly for the first time.

The Popondetta Bank informant had similar comments. *'The livelihood of the people is changing, there is power going into some oil palm areas, block holders are starting to get TV, generators, they are starting to build good houses. Other positive impacts are that people have money now, the roads are linking up areas and people are coming to town for their health services etc. Before the roads, deaths were higher, now people can come in quickly for medical treatment. There are a lot of new businesses, too'.*

Another Provincial spokesperson said, *'Popondetta, eight years ago, was a basket case for income and law and order. Now the landowners are sorted out because people are busy earning an income, so they are not robbing or holding people up. In 1994 there was a lot of trouble, Port Moresby riot squads were flying up, and then a lot of new oil palms started being planted, so by 2004, when a lot was being harvested, the law and order issue was solved and we are enjoying social and economic progress'.*

Many of these things were unexpected but very welcome, OPIC says, *'We were focused on access for fruit trucks, that's what we saw, the other things just popped up, like trade stores and PMVs'.*

Reflections

There were a number of lessons learned from this experience. An APNGIF funding ceiling of K7.5 million was introduced, a more manageable amount for any three-year program. Listening closely to local advice and using local contractors is a strongly recommended approach for other programs. Good relationships between Program partners remain paramount as does a fully resourced and supported project management team.

What would OPIC do next time? *'Next time? We'd do each road as a separate minor works contract, we'd give them one and if that was completed successfully we'd give them another. We'd structure it so that contractors work within the same local area, doing one road at a time'.*



A wash-out during construction, Jaujau road.



Rural Development

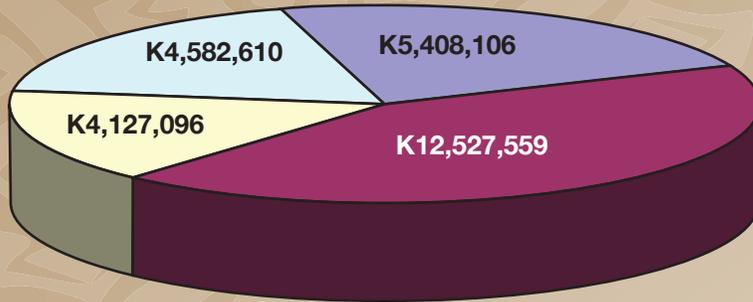
Rural Development

The four programs funded under this sector were a mixture of agricultural training, water, sanitation and hygiene, health facilities and training. Skills development was a major component of most these programs.

The Programs have provided links to several MTDS priorities, the promotion of income earning opportunities and economic growth in the primary sector, as well as to primary health care.

Eighty-seven percent of PNG people live in rural areas. Primary industries are the backbone of their livelihood. Improving the levels of production and income will underpin economic growth and improve the living standards over millions of Papua New Guineans.

The total actual spending on developing rural opportunities was K26,645,371.



- World Vision Madang
- Adventist Development Relief Agency
- University of Vudal
- World Vision Buka



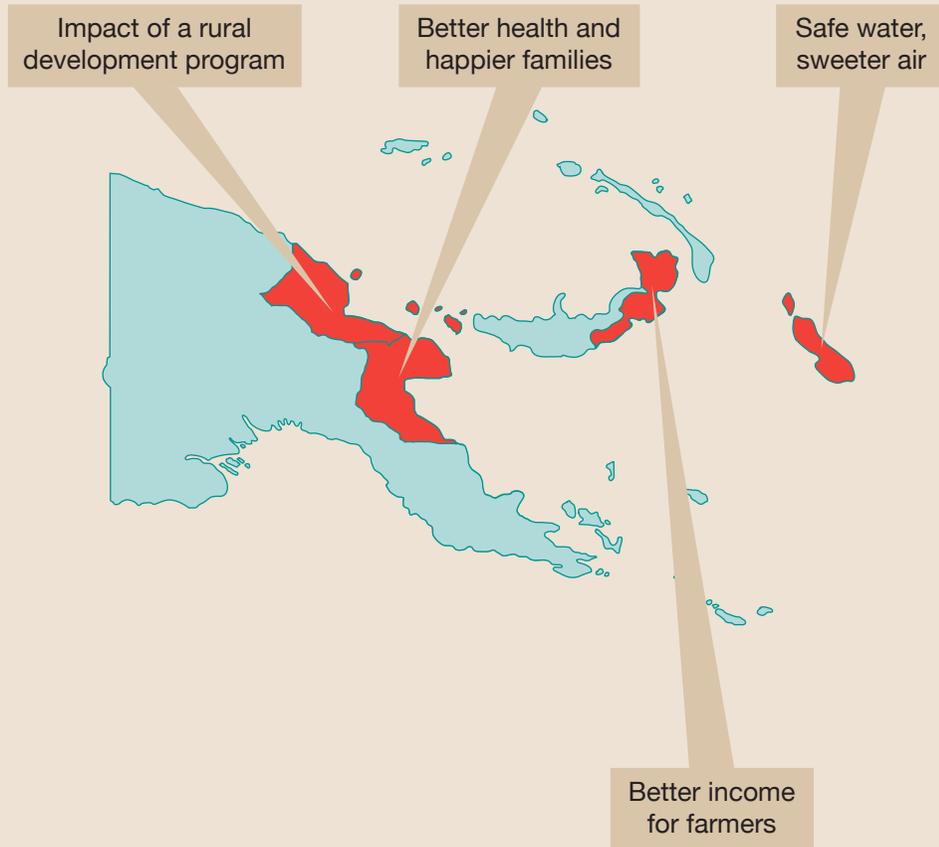
Buka Malasang community.



Water outlets, Sikirim village.



Trainees in a garten.



Stories on Rural Development in this book

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Safe water – sweeter air

‘There have been changes in the way food is being handled and prepared, mothers and children are keeping clean and there is a drop in common illnesses such as diarrhoea, typhoid and skin infections’.



A new well in North Bougainville.

The Autonomous Region of Bougainville (ARB) is rich in both natural resources and culture. A secessionist revolt from 1988 to 1997 claimed 20,000 lives. A peace agreement finalised in 2000 provided for the establishment of an Autonomous Bougainville Government. Elections for the first Autonomous Government were held in May and June 2005.



The prospects of a permanent and lasting peace on Bougainville now look very promising.

World Vision received around K5 million in APNGIF funding and the Program took three years, from April 2003 to March 2006. The objectives were, ‘To provide access to safe water to rural communities in Buka and North Bougainville and undertake associated hygiene and sanitation training in order to reduce the incidence of water borne and hygiene-related diseases in these communities’.

Eighty-one safe water systems – rain or gravity fed, bores or shallow wells - were installed in villages in North Bougainville and the east coast of Buka. Ten existing systems were refurbished. Altogether 807 latrines were completed and 514 waste pits dug. Eighty-four water management committees were formed and 163 people received training in water systems maintenance. Each community received participatory hygiene and sanitation training (PHAST).

On Buka, the Program area was very difficult and the geography complex with highly fractured, raised limestone cliffs between 40 to 100 metres above sea level. Special drilling equipment was needed from Australia to complete bores of up to 80 metres.



Drilling rig arriving at Buka wharf November 2004.

Placing the bores was difficult, usually based on where the population was located and where the water table could be reached more easily.



Bore being drilled at Hangan on Buka Island November 2004.

Collecting water

The Program provided much more than safe drinking water. On the east coast of Buka, many villagers faced a dangerous climb 60 to 80 metres down to the beach to collect spring water. The way down was dangerous enough, the way up laden with water was worse. In some cases the climb involved clinging to vines to prevent a fall.



Pathway down a cliff to fresh water.

PROGRAM DETAILS

Name: Water and Sanitation Program

Number: 023

Proponent: World Vision (PNG) Trust and World Vision Australia

Sector: Rural Development

Location: The Autonomous Region of Bougainville (ARB)

Duration: April 2003 to March 2006

Expenditure: K4,582,610

Program description: Construction of safe water systems and VIP latrines to improve health and sanitation.

A community chief tells how it was.

'Hello. My name is Wilfred Malin and I am one of the chiefs of Tohatsu. I was appointed as chairman of one of the water committees. This project brought joy to me, to my people of Tohatsu, the whole of Buka Island and maybe Bougainville. Many people's lives will be saved.

The journey down the steep cliffs to the beach to fetch water is very dangerous and has proved disastrous on a number of occasions. There have been accidents which left people paralysed and others disabled. Sometimes, children slip from the cliffs, knocking the elderly on their way down, resulting in death.

It is bad enough to get down the cliff to fetch water, but this problem is doubled when we have to climb the cliff to get back to our villages with our water containers. It was very problematic for the aged. They did not have any means of washing themselves when they couldn't get down to the beach'.

Water quality

Climbing down the cliffs had to be carefully timed to avoid high tide when the springs could be contaminated by salt water. However the village taps now dispense safe, clean water. According to a villager, *'During high tides, sea water mixes with fresh water. We have to wait for certain times to travel to the beach to fetch water. The water collected from the tanks provides good fresh water for drinking, unlike water collected from the beach'.*

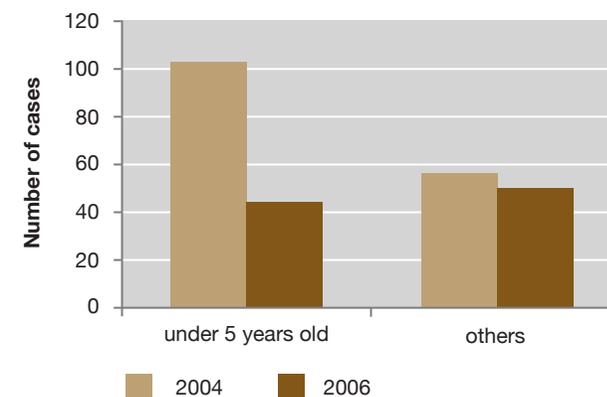


Children getting water from Hangan Village bore water pump.

Has health improved?

World Vision staff and a large number of villagers believe that health has improved since fresh clean water has been readily accessible. The APNGIF evaluation sought evidence of this even though the Program had only been completed for 12 months. Data from three health aid posts in the Program area were collected. Between 2004 and 2006 the incidence of diarrhoea among children under five decreased dramatically, something that villagers attribute to the safe water systems.

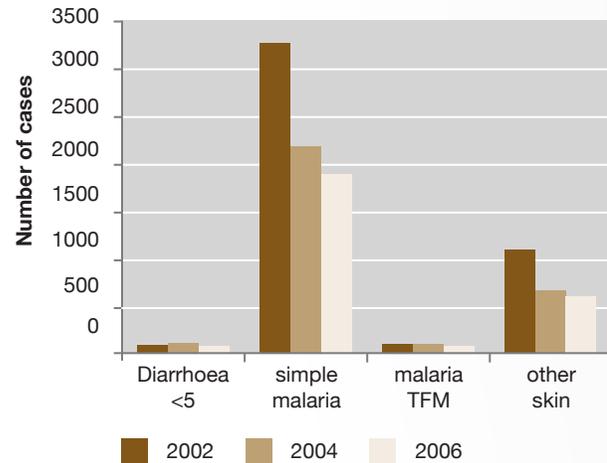
Incidence of diarrhoea recorded at three health aid posts in Buka.



Source: Hanahan, Selau and Lemanmany Sub Health Centres.

Other data points to a reduction in the number of cases of malaria between 2002 and 2006. While there is no claim that the safe water has caused this drop in cases, one villager has said, *'In my village you now only see 2 or 3 people a month, whereas before, every day, you would see people sleeping, with malaria'.*

Data on diarrhoea and malaria from three health aid posts in the WV program area



Source: Hanahan, Selau and Lemammany Sub Health Centres.

Nobody doubts that the provision of safe water has made a difference, as a village water committee member said, *'The water supply has had the most impact. There have been changes in the way food is being handled and prepared, cleanliness of mothers and children and a drop in common illnesses such as diarrhoea, typhoid and skin infections'*.

Improved relationships

The installation of the rain water tanks has reduced the time spent on fetching water. Some positive consequences of easy access are that children get to school early and parents get to their gardens without much delay. Many villagers believe that family relationships have improved as women have much more time and are less tired.



Su hin rainwater fed system.

'Women worry about washing, drinking water, washing babies. Now all these activities are easy, people have more time for gardens, they grow vegies for the market, there is a flow-on. Some are baking for the market'.

Community meeting places

As an added bonus, the catchment roofs provide shade and shelter for community activities including church choir practice, fundraising, meetings, and feasts for the community. A village spokesperson reported, *'The rain water catchments have added uses apart from collecting rainwater. The shelters have become venues*

for community activities including church choir practice, fundraisings, meetings, and feasts for the community. They have become meeting places for the community and have been used by schools for short course training'.



Buka Malasang Community.

The air is sweeter

Over 800 VIP latrines have been constructed within this program. This means villagers no longer have to walk into the trees or down to the beach. Whole communities now live in a much cleaner and much less smelly environment. In the words of a village woman, *'Previously a lot of people did not have toilets but now they do because of this project. This has stopped human faeces being disposed of everywhere, especially on roadsides. There has been a sigh of relief as the bad smells have reduced dramatically'*.

Better health and happier families in Morobe

'Bipo mipela i no gat wara, olsem na sik i stap klostu, klostu. Nau yupela i kisim wara na skul bilong helt i kam, ol mangi ol i slip gut, wasim han bipo long kaikai na ol i no save sik. Nau mipela stap gut na mipela i amamas tru long ADRA'.

[Before when we had no water nearby, we got sick quite often. Now you have brought water and Health Training, children are sleeping well, washing hands before eating so most of them are not getting sick. We now live happily and we are happy for ADRA to have done that.]



Pamelabus tank.

In 2003 the APNGIF allocated K4 million to the Adventist Development Relief Agency (ADRA) to implement a Rural Health and Sanitation Program in eight districts in Morobe Province.

The goal of the Program, completed in May 2006, was, *'To improve the health of people in rural communities in Morobe Province through the provision of clean water supply, construction of demonstration latrines and education in hygiene and sanitation'*.



Morobe Province has a land area of 34,500 square km and a population of about 600,000. About 75% of this population is scattered sparsely over remote rugged terrain, rivers, isolated valleys and coastlines. There are 111 languages which indicate the diverse cultures within the province. Villages can be as far as 40 km from the nearest feeder road. The majority do not have access to safe drinking water.



Erap Valley, Morobe Province.

Potable water supplies and an understanding of hygiene and sanitation implications for health are an important development area in PNG. Much international research has shown that primary health issues are not solved by simply introducing a potable water supply without sanitation and hygiene promotion.

After many years experience in PNG ADRA successfully developed a demand-driven model for community water programs. It includes requests for assistance and the contribution of funds and labour from the partner communities.



Wantoat schoolboys digging the pipeline ditch.

This was a community-based program. It involved community awareness, technical and social feasibility studies, water testing, the establishment of village water management committees, gravity fed water systems, demonstration latrines built with community labour, a health survey, hygiene and sanitation training, and monitoring and evaluation.

The Morobe rural health and sanitation program operated in all districts



‘The project has allowed the women in the village to participate in village activities as well as the decision-making processes within the community’.

PROGRAM DETAILS

Name: Rural Health and Sanitation Program

Number: 021

Proponent: Adventist Development Relief Agency (ADRA)

Sector: Health

Location: Morobe Province, Lae

Duration: May 2003 to May 2006

Expenditure: K4,127,096

Program description: Improve health and sanitation of rural areas through construction of water supply systems and improved latrines.

Promoting gender equity

Traditionally, men in the villages in Morobe have the greatest influence on how women do things and respond to social, economical and physical changes. This traditional belief meant that women's opinions were not usually sought.

It was the ADRA policy that for a program to qualify each Community Management Committee had to include at least two women in the five members. This ensured the views of the women in the villages were given an equal part in decision making before, during and after the Program implementation.

ADRA believes there will be lasting impact from this policy. Through the Program the barrier of gender silence in the village communities has been overcome and men's and women's views have been equally respected. Communities will be more gender sensitive in the decision making and formulation of community oriented projects in the future.

What was achieved?

The Program had an ambitious scope, one which was not only achieved but exceeded. The sites are all remote and access is difficult. Some are more than a day's walk from the last point of vehicle access. Communities carried the equipment, cement, piping and plumbing parts from the feeder roads to their villages, along very difficult terrain.

Distribution of program activities

	Water Systems	Latrines	Health Training
Nawaeb	36	68	34
Finsch	8	10	8
Kabwum	8	16	8
Huon	11	22	11
Markham	8	16	8
Bulolo	14	28	9
Tewae-Siassi	6	12	6
Menyamy	4	8	4
TOTAL	95	180	88

Source: APNGIF evaluation report.

Almost 100 gravity fed water systems were installed, 180 ventilated improved pit (VIP) latrines were constructed and 88 participatory hygiene and sanitation transformation (PHAST) training programs were completed across the eight districts.

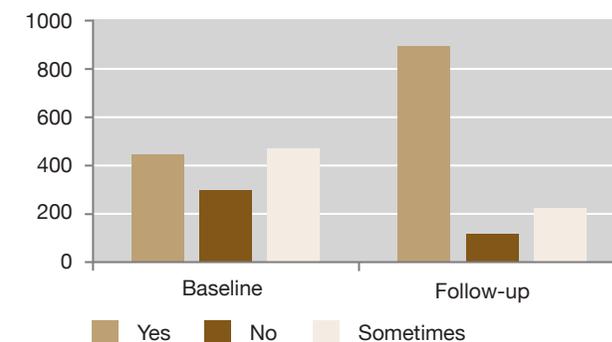


Diride latrine.

What impact has it had?

Importantly, communities have responded well to hygiene awareness education and are recognising the links between water, hygiene and health. A village water management committee member said, 'All community members seem much more aware of the need for hygienic processes to be adopted in everyday living activities. Women now wash their hands when they get up in the morning before preparing the food. Washing hands is becoming now a standard activity within the community'.

Increase in numbers washing hands



Source: ADRA surveys.

ADRA carried out follow-up surveys six months after the Program completion and compared them to baseline surveys taken at the start of each community project. The findings confirm villagers' comments, like a young man from Saling in Erap, Nawaeb district, who said, 'In the past men, women and children do not wash often because water was far from us. It's different now'.

Even only six months after the completion of the Program villagers reported positively on the health impacts.

'Before the Program skin infections, scabies, tropical ulcers and dermatitis were common. Scabies and dermatitis are contagious and are easily passed onto the children. Now children are clean and healthy as they can wash before they go to school. Animal waste is easily disposed of as there is water to clean it up'.

Communities that took part in the Program are believed to be healthier than other communities that did not. A water management committee spokesperson agreed. *'There is a clear distinction between the sickness that is experienced by the communities with clean water and those who have not. The villages with access to clean water do not appear to suffer from dysentery or other water borne diseases, like the other villages'.*



Women washing in village (Morobe Province).

Apart from health, easier access to water has made a big difference to the burden placed on women, the traditional fetchers of water. Women are reporting that they have more time and are less tired.

'We are relieved from the heavy loads and trips to the streams after a long hard day in the gardens and fields. Now mothers are able to collect clean water from their doorsteps and cook meals at evenings and the dishes are cleaned after meals.'

We have more time to do other community activities. Even consider new economic activities, such as poultry, fish ponds fed by waste water and other irrigated crops'.



Tap in Tinibe village, one of the first to get water (Morobe Province).

Concluding remarks

It is exciting to hear that a water project can have so many spin-offs, resulting in healthier and happier communities. A long term evaluation would demonstrate the sustainability of these improvements.

It is always an aim of APNGIF to promote gender equity across all programs, and this program is a good example of positive gender equity promotion.



Water outlet, Sikirim village. (Morobe Province).

Better income for farmers

'Most of the farmers are now putting the training into practical use. They are implementing what they have learnt. Cocoa growers have learnt how to prune and look after their cocoa trees so that the trees bear more pods'.



A farmer and her cocoa seedling nursery at Kerevat, ENB Province, developed after training through the IATP.

East New Britain Province had beautiful Rabaul as its provincial capital. Sadly, Rabaul was destroyed in 1994 by falling ash from the eruption of two volcanoes, Tavurvur and Vulcan. After the eruption the administrative capital was moved to Kokopo, about 20 kilometres away. Fourteen years later, Rabaul is continually being smothered by ash with Tavurvur still erupting spasmodically.



One of the benefits of a volcanic region is good soil, and Rabaul once had the most famous market in PNG, with great produce. The eruption had a major impact on trade and commerce in the province, after the 'perfect' natural harbour became clogged with pumice.

Times have been hard since 1994 so any injection into agricultural improvement is of great benefit to East New Britain.



Simpson Harbour, a beautiful natural bay and excellent for shipping before the volcano erupted.

A three-year Integrated Agriculture Training Program (IATP) was proposed by The University of Vudal at Kerevat in East New Britain Province and UniQuest (a commercial branch of the University of Queensland). As well as the capacity building for income generation proposed, an agricultural resource centre was to be built at the University. The Program commenced in June 2002 with an allocation of nearly K13 million. The resource centre was opened in February 2005 and the whole project was completed in August 2005.



Tavurvur erupting in 1994.

The Program had four main components:

- developing farming technology and business management through skills training
- improving access to training and information services for farmers including a needs analysis and the building of a resource centre
- facilitating access to credit
- developing market information systems.

Courses were offered on book keeping, land use and soil fertility, cocoa and vanilla. By the end of May, 2006 a total of 4,893 farmers in four districts had received some training from one or more of the 16 modules developed within the IATP program. A sample survey conducted by the University confirms that around 75% of those who started the training had completed their modules.

Five leader farmers, one a woman, met with the APNGIF evaluator in a village near Kokopo in February 2007. They reported that many men and women were using the skills gained from the training.

Women are growing more

Women have responded very well to the training program by implementing what they have learnt in their backyard gardens and farms.

'There were twenty women in this local level government ward that attended the training. Backyard gardens are springing up everywhere. All the women who attended the training had gardens after the training. Prior to the training, many did not. Now the women have enough to feed their families and do not have to go to the local markets to buy their supplies of local vegetables. Women now earn more money for school fees.'

PROGRAM DETAILS

Name: Integrated Agriculture Training Program (IATP)

Number: 018

Proponent: University of Vudal and UniQuest

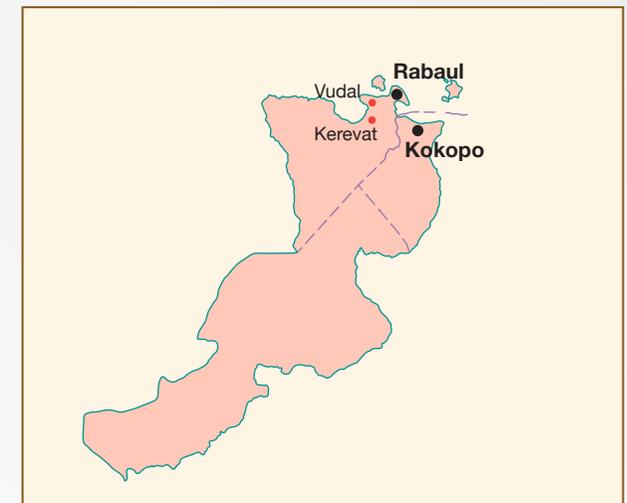
Sector: Rural Development

Location: Kokopo, East New Britain Province

Duration: June 2002 to August 2005

Expenditure: K12,527,559

Program description: Improving farming technologies, skills and market, improve access to training, information and credit.



Loans for women farmers

A local bank has focused on women for some of their loan products which are discussed during training in financial management for farmers. An APNGIF evaluator visited the local bank to talk about any noticeable impacts. This is part of their response.

'The Program includes a module on basic records and book keeping and another on savings and loans. We've got a range of accounts to save to; budget accounts, savings, and one for school fees. Payouts for school fees are between K300 and K1000, the average is about K500. One of the main targets in the Savings and Loans module in IATP is school fees.'

Overall I see that the training has helped. Some have had a fear of taking loans. Now at least they feel free to come and ask. Most of the farmers ask for forms at the training. Now they are budgeting and being encouraged to increase their production.

The demand for loans is growing. In 2005 it was K6.5 million and in 2006 it went up to K7.2 million. There are not many defaulters and most are coming in for second loans now. Membership is growing also. In 2006 we had K19m worth of savings'.

'Most of the farmers' loans are to women. The emphasis of savings and loans is on women becoming the account holders. The training encourages them to do that'.



Trainees in a garden. (Photo courtesy of University of Vudal)

Membership growth and loans 2003-2006

Year	Number of members	Value of loans provided
2003	34,000	Not available
2005	39,000	K6.5 million
2006	42,000	K7.2 Million

Source: ENB Savings and Loan Society.

What the farmers said

Farmers told three brief stories of changes in behaviour prompted by the ITAP training.

The first talked about a reformed character.

'My brother used to be a drunkard and used his hard earned cash on alcohol. He has a cocoa block, but he did not care for it and it was overgrown with bush. After going to the training, he attends to his cocoa block by pruning and taking care of the trees. He has seen an increase in production and earns a regular income from his block. He is now planning to go into coffee farming. He has stopped the consumption of alcohol'.

Another told about an old man who started gardening after attending a module.

'He started a backyard garden, tomatoes, cucumbers etc. He sold them in the market. He hasn't done anything like this before and he is still doing it'.

A third story was about a woman who started a poultry business with just five chickens.

'She cooked and processed them, wrapped the chicken in greens etc. She got K50-K60 for them as food compared to the K25 she would get selling the chicken. It was a new thing for her and she's doing well'.

Concluding remarks

The IATP has achieved above program proposal intentions. Over 70 extension officers have received 'Train the Trainer' skills and 4,893 farmers have received agriculture and small business training.

A particular achievement is the way the Program has re-invigorated the farmer extension services offered by the Provincial Government. This service was non-existent, and the Program has located unemployed extension officers and brought their training up to date including training on the modules. These officers are now working under the aegis of the Department of Primary Industries in full time positions.

The Program has also ensured that other NGOs and the private sector have been involved in training and module development. Some private sector trainers report a steady flow of income from this work.

The degree of effectiveness of the course and of enthusiasm is reflected in the number of requests for the University of Vudal to deliver the IATP. Lihir, Bougainville, West New Britain and New Ireland have all approached the IATP for delivery in the provinces, and implementation is underway.

Impact of a rural development program

'We already had cocoa but we lacked the management knowledge. Now we are pruning, we know about budding, we are growing better, much better than before, we are selling more, making a better income. With more yield as evidence, we can bring in other farmers to see the results'.



Weighing cocoa beans.

A very popular location in Papua New Guinea for divers, Madang Province consists of offshore volcanic islands and reef-fringed lowlands backed by some of the most rugged mountains in Papua New Guinea. The Balek Wildlife Sanctuary along the south coast road was the location for the Pierce Brosnan movie *Robinson Crusoe*, with many local actors including William Takaku as 'Friday'.



Colourful Madang township has been called the '*Prettiest town in the South Pacific*'. Its peninsula setting is a show-place of parks, waterways, luxuriant shade trees and sparkling tropical islands. Although small, the town has modern urban facilities, including hotels, large stores, markets and artefacts shops.

But as with all provinces in Papua New Guinea the majority of its 400,000 people live in remote, rural locations with limited access to any of the type of facilities found in the provincial capitals.

After wide-spread consultation and a series of participatory rural appraisals, the World Vision PNG Rural Development Program was implemented in Madang Province in 2002. It included 50 wards in 3 Local Level Government (LLG) areas with an estimated population of 42,000 people.

The Program purpose was, *'To improve the health, food security and economic status and community capacity to manage their own development in target communities in Madang Province'*.

The APNGIF provided more than K5 million over four years to stimulate fundamental changes in attitudes and practices in these LLGs. The extensive range of activities focused on agriculture and economic development, water and health.

As part of an evaluation, the APNGIF visited a small number of program villages. Communities talked of impacts from training in improved cocoa production, Village Health Volunteer (VHV) and birth attendant training, and access to safe water.

Agriculture and cocoa

Cocoa was only one of the many agriculture, food security and economic development activities undertaken by World Vision. A number of four-year targets in farmer training were exceeded.

- 45 leader farmers were identified and demonstration cocoa plots were set up. Food security training reached 938 farming families through this extension work
- 90 cash crop farmers (cocoa, coffee, vanilla and coconut) were identified as leaders. Demonstration plots were set up and 3,150 farming families benefitted from cash crop extension
- five cocoa fermentaries were built.

PROGRAM DETAILS

Name: Rural Development Program

Number: 013

Proponent: World Vision Australia and World Vision (PNG) Trust

Sector: Rural Development

Location: Madang Province

Duration: April 2002 to May 2006

Expenditure: K5,408,106

Program description: Developing a range of activities focussed on agriculture and economic development, water and health.

Pictures from left to right:

1. Madang Town
2. Agriculture training posters in Igurve village
3. Introduction to poultry farming



1



2



3

In the villages visited by the APNGIF, the cocoa training had made a particular impact. A key outcome has been the substitution of open-pollinated plants with hybrid stock, which produce a better crop.

'Before the World Vision training we had been planting cocoa but the seeds were open-pollinated plants, not a quality hybrid, so they were low yielding and not disease resistant. World Vision showed us a budding technique: we extracted the bud from improved cocoa and budded it onto the old cocoa, then we got a brand new tree with improved results and higher production.'

There's a big difference between the open pollinated and the budded trees. The budded trees bear more and quicker. With more yield as evidence, we can bring in other farmers to see the results. We already had cocoa but we lacked the management knowledge. Now we are pruning, we know about budding, we are growing better, much better than before, we are selling more, making a better income'.

Water

Thirty water delivery systems were constructed as part of the Program. The water was clearly an exciting development for village women. One said,

'We had a long way to walk, one or two kilometres to get water from upstream. When it rained the water was not good. We got very tired carrying

water cans or a pot on our head. Before the water came we used to carry 20 litres in our billums. And we didn't have safe water because of the logging up the stream, and the streams dried up too'.



Tap in Meneir village.

Another village had seven taps installed and the community is planning ways of extending the pipes to a community nearby which did not have water.

'We've got seven taps. We "stap good nau". The water system has eased the burden for us. We've got more time for other activities. The water has helped us clean the kids up too. And its easy to water the garden. There has been a reduction in malaria we think. So water easily accessible has reduced sickness and has made life easier'.

A third community had previously been informed by the Department of Health that it would be too expensive to get water to the village. The news was devastating. But the actions of World Vision changed their outlook.

'We had a visit from the Department of Health a while ago and they said it was too expensive to get water to this village. This made the community feel hopeless. But World Vision did it'.

Village Health Volunteers

World Vision trained:

- 43 Community Health Workers and 12 Department of Health officers in the health information system (HIS)
- 123 Village Health Volunteers (VHV) - 80 village birth attendants, 40 village health attendants and 3 traditional birth coordinators.

Most trainees were women who could accompany village women to health aid posts and assist and provide comfort at births. *'They were women, they can go with us to the health aid post. They had never had training before World Vision. So new skills. My baby was delivered by the volunteer, it went well'.*



Village Health Volunteers with ante-natal mum.

At the aid post, the effect of having people in villages who could help with basic family health and with maternity care was clear, many people can now be treated at the village level, reducing demand on overstretched aid posts. *‘Before World Vision training the aid post used to have 70-80 patients a day, but since the training this has dropped to 20 patients a day, so that’s the improvement and it is sustained’.*

A Department of Health representative said that VHV training and awareness-raising on identifying high risk mothers and on immunization for children made a big difference in many of the communities.

‘The trained VHV are assisting communities to identify the high risk mothers, they are reporting village deliveries to the director of the VHV at the Department of Health. They are assisting in immunization. Before, most kids were never immunized. Now there is some protection on disease like measles. Prevention is the key’.

In 2002 World Vision conducted a baseline survey which examined villagers’ participation in health-related activities. The survey was repeated in 2005 and discovered significant improvements in a number of areas related to the Program activities.

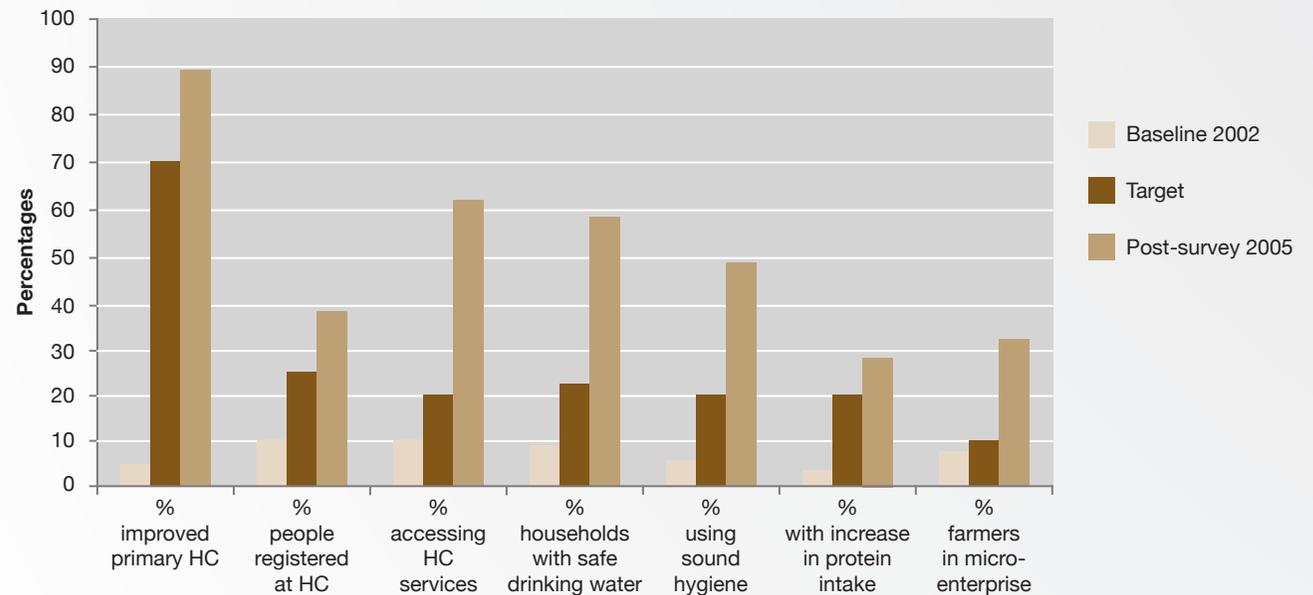


Opening of Menia water supply.



Ante-natal clinic in a rural village.

Significant outcomes after 3 years



Source: World Vision.



Health

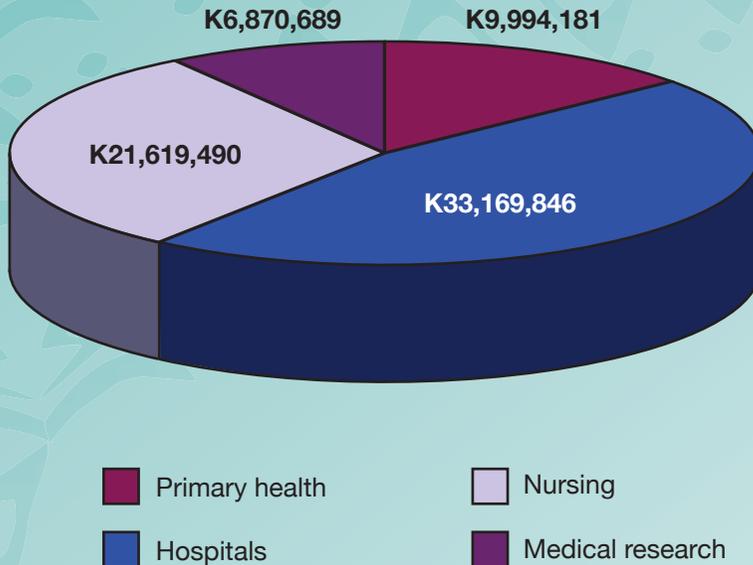
Health

Papua New Guinea has been reported as having one of the poorest health services in the Pacific Region. Poor roads, mountainous country and remoteness makes access to basic or primary health services very difficult. There are few doctors or nurses in rural areas. Health aid posts are run by community or volunteer health workers and are mostly without power and sometimes safe water.

The APNGIF has funded eleven programs in the health sector since 2000. These have spanned nursing education, medical research, primary health care and the upgrading of several general hospitals. In particular, primary health care is another of the expenditure priorities established under the PNG Medium Term Development Strategy 2005-2010, as is HIV/AIDS prevention.

Spending in primary health care programs reached K14,964,765 and funds of K29,387,337 were allocated to five major hospitals. As well, three nursing programs received a total of K21,619,490 and K6,870,689 was provided to a medical research facility.

The total spending in health was K71,654,206



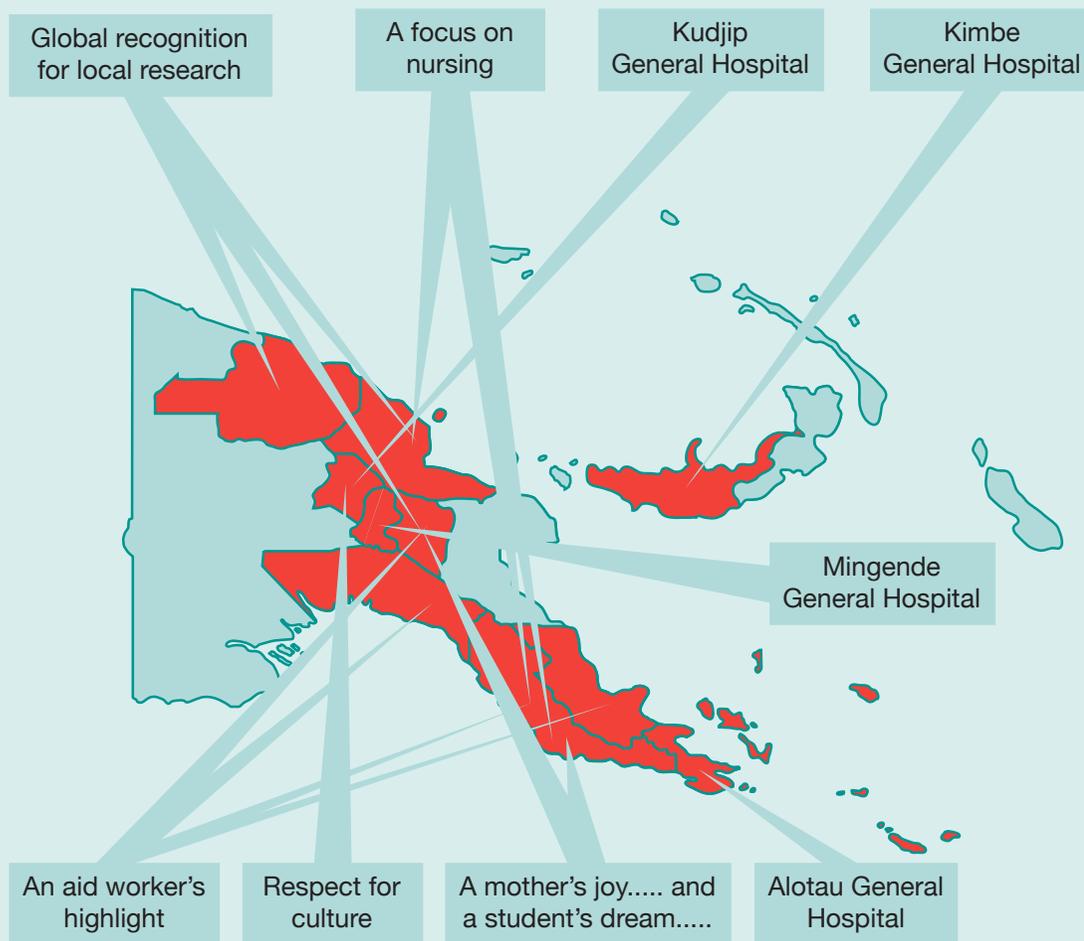
New building rising behind existing ward of Mt Hagen hospital.



New dormitory for nursing students - PAU.



IMR staff housing, Madang.



Not all programs in the Health Sector have stories in this book but details are provided in the appendix.

Stories on Health in this book

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An aid worker's highlight

'My own journey, the highlight... I think just going into communities for the first time and then going back after the Program and seeing and feeling that life is different. Now they are not just saying "we want you to give us...", but saying "we would like to...". So for me, I think that's the real highlight'.



The Salvation Army's Christine Gee was project manager for a two-phase, six-year, K10 million program aimed at improving community health in remote areas of four provinces.



Phase 1 provided training in leadership and self management, sanitation, improved health facilities, small water projects and village workshops in a range of agriculture and small livestock skills as well as literacy. Phase 2 built on this with more training in health services and promotion, skills development, literacy, safe water, hygiene and nutrition. Both phases were aimed at isolated and remote communities scattered throughout the north and south of PNG.

Christine, a remarkable woman, came as a volunteer aid worker in 1994, then joined the Salvation Army. She modestly describes the highlights.

Christine Gee:

'This is my 14th year in PNG. I came originally as a volunteer, based at the Salvation Army because of my health background. They wanted to help the health services to become a little more prevention based, looking at how communities can improve health and prevent things. So that's why I came.

As we got more involved in community development projects we realised that community health was more than just attacking disease. There's clean-up, there's water, there's the children, so that's really what I have been doing over the years. That's why we have been establishing health centres and aid posts in various communities throughout the country, so we could provide broader based health services, including literacy, different aspects of education, agriculture. In phase 2 we have been looking at ways communities can have more financial security. Even purely subsistence communities these days need some access to cash. They need skills that will help them develop their capacity to earn.



Women at Ibusamoke during a sewing training class.

Before I came as a volunteer I never imagined I would be doing this work. I never thought I was the kind of person who would be getting out into some of these remote places and spending time with people. But that's what has made my time in PNG so much more meaningful, getting out and spending time in the villages, its going in and sitting around the fire in the evening, hearing the true stories of what life is like and how we can help people'.

Listening

Christine recalls an important lesson about listening to what local people want when planning services and matching the wishes of the beneficiaries to the service design.

'When I first came here I went into the Highlands to encourage women to come into our health facilities to give birth. But we didn't ever really get the number of people coming that we would have liked. Even people who were at risk still didn't come. The women didn't want it that way. So now we give really good extensive training to Village Birth Attendants and health volunteers who live in the communities. They are all women who have been chosen by the community'.

PROGRAM DETAILS

Name: Primary Health Care (Phase 1)

Number: 002

Proponent: Salvation Army PNG

Sector: Health: Primary

Location: Central Province, Eastern Highlands Province, Gulf Province and Oro Province

Duration: November 2000 to January 2004

Expenditure: K4,833,450

Program description: Improving health facilities and facilitating trainings and workshops for the villages.

Name: Primary Health Care (Phase 2)

Number: 028

Proponent: Salvation Army PNG

Sector: Health: Primary

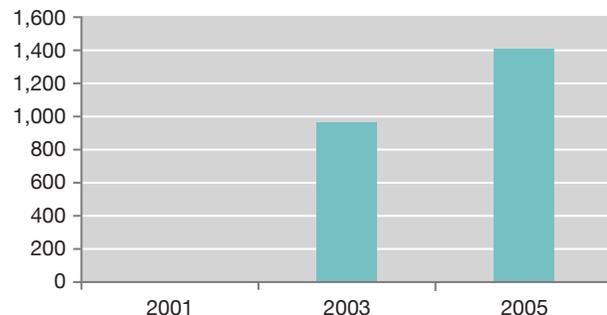
Location: Central Province, Eastern Highlands Province

Duration: July 2004 to July 2007

Expenditure: K5,160,730

Program description: Improving health facilities and facilitating trainings and workshops for the villages.

Growth in family planning attendance at the SAPNG community health posts and health centres in the Program's Southern Provinces



Source: Salvation Army PNG.

'The training has been very successful because it gives teaching within the village about birth but also about infant nutrition, first aid, and child health. It includes immunisation, HIV/AIDS and gender issues. When they complete the course, the women are recognised by the Department of Health. Their referrals to health centres are recognised and accepted'.



Child being treated at Matairuka community health post in Rigo District Central Province.

Program sustainability

Christine believes that running two consecutive phases of the Program has made a big difference to the sustainability of the training villagers have received. Even so, Christine feels that the impacts within communities should be supported even further.

'I think if we had finished the Program after phase 1 it would have had doubtful sustainability. At that stage the communities had just done the initial set-up. They'd had leadership training, hygiene and sanitation training and a little bit of exposure to some skills training. It wasn't until the second phase that you could build on that and offer the communities some skills development.

I believe that after the second phase what we have done is sustainable. The knowledge and the experience is there and the people themselves have a much better capacity to meet their community needs.



New gardens at Barola started since their engagement in the Program.

But even in those communities and even after six years there is still more that could be done. There is a lot more interest now in the sorts of skills that help people to build their financial capacity, small business skills. That's where I'd like to be able to do a bit more in the future. Then I could see the mobilisation in the first phase, skills development in the second phase and then actually small business skills in the third phase'.

Christine's highlight

Christine has worked hard for six years, implementing and managing the two phases of APNGIF programs. Her personal highlight is described below.

'My own journey, the highlight... I think just going into communities for the first time and then going back after the Program and seeing and feeling that life is different. Before you might have asked, "What is it you really want?" and they might have said, "We want an airstrip, power, we want a good road". But you can go into a community now and say, "What do you want?" and they might say, "We'd like to learn how to grow rice, because going to town and buying rice is very expensive". Communities have much more realistic goals, and they have got a plan of how to get there! They are people who think realistically about their future and the steps that they can take. Now they are not just saying, "we want you to give us...", but saying, "We would like to...."'. So for me, I think that's the real highlight'.

What did the Program achieve?

In phase 1:

- six new community health posts were built and 15 renovated
- 18 water systems were planned and 31 actually installed
- the SA planned to train 360 people in hygiene and sanitation but actually trained 675
- community management training was planned for 18 communities and happened in 35: 35 management committees were formed
- 792 farmers received training (20% were women)
- 1588 children and 496 adults received literacy training.

In phase 2:

- 363 skills development short courses were delivered (health volunteer, sewing, carpentry, agriculture, small business, hygiene and sanitation, income generation)
- a number of training manuals were written and translated into Tok Pisin
- three resource centres were built and 1 renovated
- two new community health posts were built and 16 were renovated
- 90 training courses were run for SA PNG staff on program skills
- further training was provided for community health workers and literacy trainers
- 426 community-based literacy teachers were trained and 106 community literacy learning centres set up.

The Program yielded some unexpected outcomes:

- rather than build village houses, some carpentry skills courses included working for the local schools. Classrooms were repaired and desks built. New pit toilets were constructed at many schools. At Launakalana Elementary School the carpentry trainees replaced the few old inadequate desks with 100 new ones
- the literacy courses were intended for adults but many young children were enrolled as preparation for primary school where education is in English. This prompted the teaching to become more creative, covering new areas like the environment and attracting even more enrolments, especially amongst the youth

Children taking literacy classes.

Area	Boys	Girls	Total
North	431	465	896
South	339	353	692
Total	770	818	1,588

Source: Salvation Army PNG.



Literacy training in progress 2002.

- women at Boregaina village in the Southern Region who received training in sewing and cooking are making *meri blouses* and selling these at the market. Elsewhere women are selling hot food and cakes. Experience has shown that money earned by the women is very likely to be used for school fees, health care and the benefit of the whole family.

Respect for culture

'Papua New Guineans believe that when you destroy a morgue, you've got to make some form of feasting and address the dead. This was not done in this project and we had a lot of incidents....'.



New building rising behind existing wards.

In many parts of Papua New Guinea beliefs about spirits, witchcraft and sorcery have been maintained over thousands of years. In 2008, there are laws in PNG which deal with good and bad sorcery and only bad sorcery is a crime. When the death of a community member occurs the death may be blamed on malign spirits rather than natural causes. There are many varied traditions and practices across Papua New Guinea which need to be followed to appease these spirits, and the dead.



When someone dies, the spirit is said to separate from the body and has to be persuaded to accompany the person to the grave. If the death is peaceful and natural the spirit goes willingly. If not, it can stay around and become troublesome. When the old morgue was demolished the Mt Hagen hospital was in danger of disturbing the spirits who lived there, and ceremonies had to be carried out. The blood of a pig should have been spilled around the outside of the spirits' home, and a feast held. Project staff felt that the traditions had not been completed well and a growing number of incidents were believed to be the result of this.

Papua New Guineans also believe you should always knock when entering a morgue, as the spirits of the dead might be out and about. Knocking gives them the time to settle down and the visitor does not then disturb them.

In August 2004, the APNGIF allocated K7.3 million to the Mt Hagen hospital program for new buildings and resources. Part of this development included a new morgue, and the cultural issues raised are discussed in this story.

The objective of the Program was, *'To provide appropriate infrastructure and equipment that will enable Mt Hagen General Hospital to provide efficient, effective, appropriate and safe patient care and specialist medical services to all who seek care'*.

The Program was completed by June 2007 and the hospital had three new operating theatres, tutorial and staff rooms, patient holding and recovery areas, procedure and preparation rooms and scrub and equipment rooms.



CEO and Project Manager discussing issues.

There were also new wards with full amenities and the new mortuary with autopsy and storage capacity.

The Program was not without incident. Some were attributed to a lack of attention to cultural practice around death. The project manager for the Program tells a number of stories about perceptions and culture.

'We had incidents along the way, some of which affected the project.'

Papua New Guineans believe that when you destroy a morgue, you've got to make some form of feast and address the dead, which was not done and we had a lot of incidents.

First, nature was not good to us in terms of rain. The rest of the year the rain was quite normal, but during this period we had landslides on the road, contractors were affected and materials got stolen.

We had vehicles run off the road, we almost had some of our workers buried. Fortunately, we did not have anybody die'.

The most serious incident occurred on the building site. The Program's contract assistant Regina and a building inspector were inspecting a foundation trench that ran alongside an overhanging bank. Without warning the overhang collapsed, burying them up to their shoulders in clay and the pair had to be dug out by a team with shovels and spades. The building inspector was gashed by reinforcing steel, Regina had nasty bruises and cuts. But they were safe.

PROGRAM DETAILS

Name: Facilities Upgrade Program

Number: 029

Proponent: Mt Hagen General Hospital Board of Management

Sector: Health: Hospital Upgrades

Location: Mt Hagen, Western Highlands Province

Duration: August 2004 to April 2007

Expenditure: K7,337,565

Program description: Providing appropriate infrastructure and equipment.

Addressing the dead

After that incident, the morgue attendant and the contractor decided to host a small feast and appease the spirits.

The morgue attendant of the hospital was addressed as if chief of the dead. He was offered live chicken, pig and mumu. Then he translated the message to the dead for whom he was responsible. So the relationship between the living and the dead was culturally addressed and after that no more incidents were reported.

The project manager goes on to say, *‘One day I went to visit the morgue with some visitors, and we just walked in. The culture of the morgue attendant requires him to always knock on the door of the morgue and say hello or good morning. He addresses the dead in the mortuary. I walked in without having that in mind. When we walked in the mortuary cabinets were all locked, but while we were talking to the morgue attendant one of the cabinet doors opened. We were shocked. There are many beliefs associated with the Project, and some funny things happened’.*



New morgue facility.

Being in the right frame of mind

‘This is a hospital, we have operations going on, and sometimes we have to deal with the dead. The operating theatres are for life or death sort of operations. People look at the buildings and want to say appreciative things, but they think if they appreciate the morgue, they may end up there. Those of us who are in charge of managing it have to deal with these perceptions, we have to address people in the right frame of mind’.



New surgical ward.

The future for the Program staff

The project manager believes that the experience he and his female contract assistant gained during the APNGIF program has opened the future to more jobs. He was correct, since his assistant now works as an infrastructure development specialist for the APNGIF.

‘It is a good thing to be involved in such a project. I had a female contract assistant. That was a bit of a surprise to the medical profession, a lot of them may be female, especially the nursing population, but having a female involved in a technical project made an impression. Regina is with the APNGIF now. She was my assistant and I guess what she gained here opened the door for her. After being with you, she might have an international exposure.’

I would think that the Program will also help me as a project manager and as a PNG national. The experience gained, the benefits gained, it is worth it for tomorrow. So for me I would thank AusAID for the project’.

Cultural impact

The impact of cultural beliefs on any program should not be underestimated. It is very easy for donors to overlook these issues. Papua New Guinea has a very strong, vibrant and varied culture, one of the very things that makes Papua New Guinea so special, and respect for culture in program planning is vital.

A focus on nursing

‘Most of us want to go back to our places and help our own people. Many people say nursing is a good career, we are a big help to our people, and people in my village didn’t have a health worker so now I can go back and help my people’.



Reception desk at the new clinic, Pacific Adventist University.

Papua New Guinea has a population of nearly six million, with 80% of people living in rural areas. More than 800 languages are spoken, so communication and cultural differences demand quite different approaches to health care service delivery. Life expectancy is little more than fifty years and the infant mortality rate is one of the highest in the South Pacific. Just under half of the children under five are not receiving proper nutrition and women and children (mainly rural) die from easily preventable and treatable diseases.



Nurses and health education officers are often the sole providers of health care for the people who live in rural and remote PNG. They often work in extremely isolated areas, dealing with life and death emergencies and injuries as the result of domestic and other violence. The health or aid post will have no electricity or running water. They deliver babies to the light from fires or torches, and face dire shortages of drugs and equipment. They are on call 24 hours a day. The nearest road may be a day's walk away, or reached only by canoe down river.

In spite of all the disadvantages, many graduating nurses opt to go home to their villages to help their people. Under a community participation model, nurses become the trainers, teaching and supervising selected people in the community to carry out basic health service duties.

Both the 1997-2002 and the 2005-2010 PNG Medium Term Development Strategies said that investment in health care was a, 'Fundamental requirement for social and economic development'. The expenditure focus has been preventative and primary care, 'Through aid posts and health centres with effective supervision and trained health extension officers or nurses'.

The APNGIF has funded three programs designed to upgrade and upscale the training of nurses:

- Lutheran School of Nursing (Madang), K3.3 million, completed March 2004
- Pacific Adventist University School of Health Science (NCD/Central) K8.9 million, completed February 2006, and
- University of Papua New Guinea School of Nursing (NCD) K7.6 million, completed May 2006.

Each program targeted an increase in the number of trained nurses available for the National and Provincial Health Departments.

The Programs also had individual objectives. The UPNG School of Nursing included the preparation of course materials and a focus on producing nurse administrators and educators; the Lutheran School of Nursing (LSN) particularly aimed to increase the number of trained nurses available for rural community health centres; the Pacific Adventist University (PAU) campus was the focus of re-settlement for the School of Health Science, driven from its previous campus by tribal fighting and violence.

What was built?

Overall K19.8 million of APNGIF funding has provided up-to-date resources for the three Schools of Nursing. New teaching facilities, lecture/conference theatres, teacher houses and student dormitory accommodation were built.

Pictures from left to right:

1. Building a new dormitory - LSN.
2. Exterior of the new building nearing completion - UPNG.
3. New Dormitory construction underway - PAU.



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PROGRAM DETAILS

Name: Facilities Development Program

Number: 014

Proponent: Lutheran School of Nursing

Sector: Health: Nursing

Location: Madang, Madang Province

Duration: April 2002 to March 2004

Expenditure: K3,277,595

Program description: Building new teaching facilities and accommodation for teachers and students.

Name: Nursing Education Program

Number: 020

Proponent: University of Papua New Guinea

Sector: Health: Nursing

Location: Taurama Campus, National Capital District

Duration: May 2003 to May 2006

Expenditure: K7,573,234

Program description: Giving specialist training for nurses.

Name: Permanent Facilities for the School of Health Science Program

Number: 027

Proponent: Pacific Adventist University

Sector: Health: Nursing

Location: National Capital District

Duration: June 2003 to November 2006

Expenditure: K8,964,336

Program description: Building more advanced teaching facilities for the school.

At UPNG, IT and ET facilities were added and PAU received practical laboratories, demonstration and therapy rooms as well as a health clinic for the PAU and local community. Each school gained computer laboratories and upgraded services. Two new dwellings for nurses were constructed at each of three Lutheran School of Nursing outstations. PAU and LSN received student dormitories.

Have nursing student numbers increased?

The Lutheran School of Nursing and the Pacific Adventist University's School of Health Science have both increased their intakes since 2004, and reached capacity levels for student numbers. The LSN exceeded its objectives of increasing the number of new incoming students to 60 per annum, and PAU is achieving its goal of an, 'Annual throughput of 60 diploma - trained nurses plus degree qualified graduate professional nurses'. The UPNG upgrade was completed at the end of May 2006, however student numbers in 2006 and 2007 are lower than for the previous three years. This could reflect in part the reduction in size of the new lecture hall from the planned 150 to 98 seats.

Student enrolments 2003 – 2007

Year	LSN	PAU	UPNG	Total
2003	76	n/i	139	215
2004	149	48	142	339
2005	173	71	130	374
2006	181	80	103	364
2007	150	87	108	345

Source: LSN, PAU, UPNG.

What do students and staff say about the new facilities?

In 2006 Lutheran School of Nursing students studying for a Diploma of General Nursing, spoke of the facilities provided by APNGIF funding.

'Things here make learning easy. For instance we can sleep well, only two girls to each room, we have more space for studying. The school now has 22 computers in the lab and seven in the library. It makes it easier to do assignments. Computers improve our knowledge, we learn new skills'.

Lutheran students say the new facilities at the rural outstations will enhance practical assignments, which are important in gaining confidence in dealing with patients. *'There are six houses, two at Yagaum, two at Alexishafen, and two on Kaokao Island, just like real houses, with a living room and two students per room. Its harder work at the outstations and we have to cook and clean for ourselves in the houses. But the benefits are more experience, more confidence, we can do things on our own, and we can assist the nurses'.*

Most Lutheran students are focused on helping their communities in rural areas.

'Most of us want to go back to our places and help our own people. Many people say nursing is a good career, we are a big help to our people, and people in my village didn't have a health worker so now I can go back and help my people'.

Pictures from left to right:

4. New dormitories at LSN.
5. Interior of one of the outstation houses - LSN.
6. View of the campus with completed staff houses - LSN.
7. The new dormitory for nursing students - PAU.
8. Two nurses in the new health clinic at PAU's School of Health.



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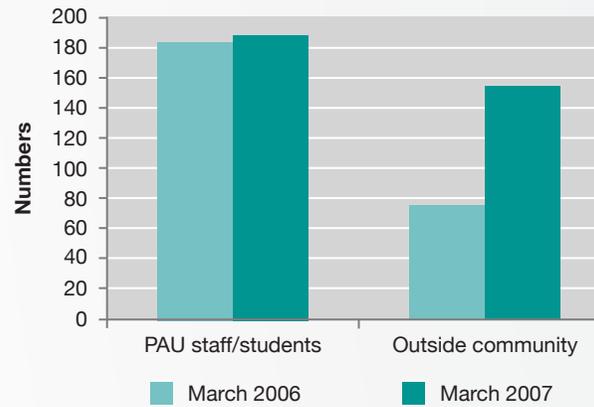
PAU School of Health Science clinic

A special feature of the upgrade at Pacific Adventist University's School of Health Science was the emphasis on practical training through the laboratories and the health clinic. This clinic provides a range of services for those on campus but also opens its doors to the local community.

Two nurses work in the clinic full time and the students gain invaluable tuition and experience. The new clinic has two wards and a delivery room as well as interview and staff rooms. There is appropriate storage for drugs. One of the nurses had this to say, *'In the old clinic there was only one room. Patients never had any privacy. During an examination people could hear us talking and they were too shy to tell us what was really wrong. Here it is different, they really tell us, because it's private. Here we have a separate delivery room and there is a waiting area for people now. They are not inside listening to everything going on. Before we didn't have anywhere to store the drugs, we just squeezed them under the bed in cardboard boxes'.*

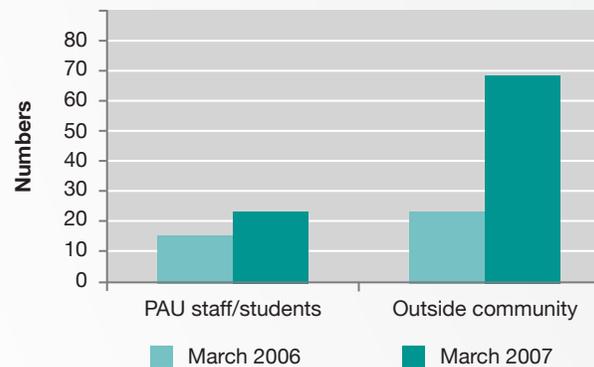
As the clinic's reputation grows, the number of patients coming onto the campus from local communities is growing. The clinic is providing a much needed service to people whose access to first aid and medical advice is otherwise limited.

Attendance at daily clinic at PAU



Source: PAU Health Clinic.

Attendance at well baby clinic



Source: PAU Health Clinic.

Community attendance at well baby clinic is strong and consistent and between 75 and 186 community members use the clinic services on a monthly basis. Attendance from people on the PAU campus is also high. Without the services available at the upgraded clinic, many people would be forced to travel into Port Moresby or other health posts, or miss out altogether on medical attention.

The nurses at the clinic are happy with their new surroundings and the part they play in the education of the students. *'We are working together with the students, we provide them with work experience, practical experience, they work with us with the patients. This never happened in the old place because there was just no room. We would like to thank AusAID, we are really happy'.*

Pictures from left to right:

9. The plaque unveiled on opening day, PAU.
10. The main entrance to the School of Nursing, UPNG.
11. Prime Minister Sir Michael Somare cutting the ribbon on opening day, PAU.
12. The new medical imaging laboratory, UPNG.
13. One of the new practical clinic laboratories, UPNG.



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Global recognition for local research

'We are providing evidence-based information about things like malaria treatment choices. The Operational Research Unit is being asked for more and more evaluations on things like bed-net programs, and mother and child health interventions, TB, community behaviour around illness. Some of it is globally funded....'.



New library in operation.

The Papua New Guinea Institute of Medical Research (IMR) has a history of commitment to health research that receives strong support from the Health Department and workers in the health sector. The IMR has a reputation for excellence in research, the standard of which has brought it high international standing. Much of the research has significance across the globe, and is referred to beyond the borders of PNG.



For instance, the Institute has long-standing collaborations with research groups in Europe, North America and Australia. These have brought diverse expertise and substantial project funding into PNG. A collective goal of these collaborations is to significantly augment the scientific capacity of local PNG scientists.

The PNG IMR was established in 1968 as a Statutory Body, independent of but responsible to the Minister for Health.

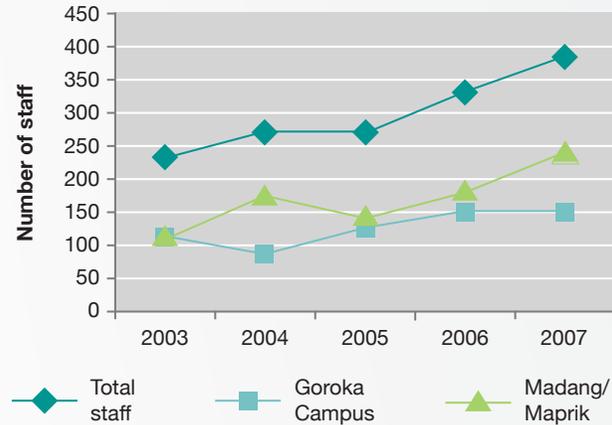
Since then major research programs have been established for the country's biggest health problems: respiratory diseases, malaria, filariasis, malnutrition, enteric diseases, sexual health and women's health. All of the Institute's research has elements of basic and applied research, it is problem driven rather than curiosity driven. The Madang field site of PNG IMR is partnered with a global consortium, MalariaGEN (Genomic Epidemiology Network), whose goal is to provide the first genome-wide association study of severe malaria. The data from this study will have implications in the design of the global malaria eradication strategy.

The Institute conducts its work from laboratory and office complexes in Goroka (Eastern Highlands Province), Madang (Madang Province) and Maprik (East Sepik Province), with smaller branches in Port Moresby and Wewak. Various field stations support ongoing research in rural areas. Over 300 people are employed in the operation of this network.

The APNGIF provided funding of K6.8 million for infrastructure and training. New construction included a library (with books and audio visual equipment), an archive, a lecture theatre, Operational Research Unit (ORU) offices and staff housing. Renovations provided better laboratory space, a computer laboratory, larger administration offices and improved housing in Goroka and Madang.

In 2007 the APNGIF visited the IMR in Goroka to gather staff views on the improvements and their impacts. Most noticeable was the general growth of the Institute, demonstrated by staffing levels, graduate numbers, projects, international interest and international grants. A Chief Scientist said, 'IMR is already growing out of its new clothes'.

IMR staff numbers including community based field staff



Source: IMR

Success breeds success

Growing demands for health-related research are stretching the existing staff and even the new resources. More and more senior social and laboratory scientists are needed, and the Director says that the upgrading of the facilities has helped make IMR an 'Attractive employer'. *'We have four to five times more work than in 2000, it's a major challenge. The malaria studies have grown the fastest. We've got three post-PhD scientists, three senior clinicians and two national medical graduates working in this and we are still looking for three or four more post-PhD scientists. Our lab is the best in the Pacific excluding Australia and New Zealand. We have become an attractive employer'.*

PROGRAM DETAILS

Name: Infrastructure and Capacity Strengthening Program

Number: 012

Proponent: Papua New Guinea Institute of Medical Research

Sector: Health: Medical Research

Location: Goroka, Eastern Highlands Province, Madang Town, Madang Province and Maprik, East Sepik Province

Duration: April 2002 to June 2005

Expenditure: K6,840,855

Program description: Construction of a library, an archive, a lecture theatre, Operational Research Unit (ORU), offices and staff housing.



The IMR had the foresight to acknowledge the importance of empirical social research in understanding the way in which scientific research can add to policy development. The Operational Research Unit offices were built under the APNGIF program. The Director says, 'Again, as the capacity has grown, so has the demand for IMRs services'.



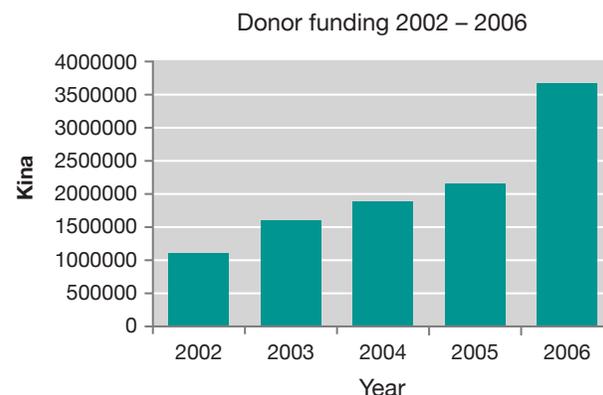
Adding more relevance to policy.

'The Operational Research Unit concentrates on projects that make our work much more relevant to National Policy'.

Importantly the IMR capacity and capability is attracting more and more international interest, with growing links with other research institutions as well as overseas donors.

'Some of it is globally funded, for example some of our malaria and HIV studies. We have strong links with Australia, Spain, USA, Europe now. The Solomons and Vanuatu want IMR to go and study vector-borne diseases there, we really have a lot of expertise in vector-borne disease'.

Increase in donor funds showing substantial rise after APNGIF program completion 2005



Source: IMR

At an APNGIF workshop in 2008, another IMR senior staff member linked the improved facilities and administrative procedures from the APNGIF program to the increase in international interest in the IMR. 'Through the support from the APNGIF we are the first PNG organisation to receive substantial funding from the Bill and Melinda Gates Foundation. We are running that program in Madang and the Sepik. It is a very, very important direct consequence of the Program. We are going as far afield as the United Kingdom, having successfully attracted funds from people like the Wellcome Trust. We have other donors like WHO, the World Bank and UNICEF, Oxfam as well as AusAID'.

And for the future? The Director says, 'I see IMR as growing and maintaining its place in contemporary applied research which is relevant and excellent, and recognised internationally as well as locally. We will continue to turn scientific research into policy research for public health'.



A triplex housing block at Goroka campus.



Madang campus staff duplex.

A mother's joy.....

'It's true too many of us and our babies died before, now I see it does not have to be that way for you young women'.

and a student's dream.....

'We did not think anyone cared about us here. Now we know that our community and others do care and that really helps us continue teaching in these isolated places'.



New community health post.

This was a comprehensive 2-phase program covering areas of health, skills development, literacy and education and training as well as safe water, hygiene, nutrition and health promotion. Run by the Salvation Army, each phase was implemented over a three year period, six years in all. It was the broad approach that allowed the Program to provide training of Village Health Volunteers as well as carpenters who could build desks for desperately empty classrooms.



The Program covered a number of rural and remote areas in four provinces. The overall aim was to improve community health, using a holistic approach which recognised the many influences on health and wellbeing. The two phases of the Program received K10 million in total.

In phase 1 of the APNGIF program the Salvation Army's Health Component built six new and renovated 15 existing community health posts. In phase 2, a further two new community health posts were built and 16 renovated. A large number of villagers and health personnel were trained in health, community development skills and management.

Village Health Volunteers were trained to assist during pregnancy and childbirth, as well as child health, first aid and health education. This included family planning, immunization, gender issues, sexually transmitted infections (STI) and HIV/AIDS.

An old woman embraces change...

The Salvation Army consulted with communities to see whether or not they would embrace health training and upgraded services. One elderly woman as part of giving her approval for the Program to run in her community, said (with tears),

'It's true too many of us and our babies died before, now I see it does not have to be that way for you young women. The things these people say are not easy for us to hear but listen and learn from them, they know what they are saying and we must trust them'.

Early signs of positive change

Early statistics show that child spacing is being practiced more in communities where there are trained Village Health Volunteers. This should result in healthier mothers and children. One mother said, *'I think my babies will not die like many did before so I will not have to have as many babies as my mother did'.*



Drug supplies in the new health centre.



New Matairuka community health post.

PROGRAM DETAILS

Name: Primary Health Care (Phase 1)

Number: 002

Proponent: Salvation Army PNG

Sector: Health: Primary

Location: Central Province, Eastern Highlands Province, Gulf Province and Oro Province

Duration: November 2000 to January 2004

Expenditure: K4,833,450

Program description: Improving health facilities and facilitating trainings and workshops for the villages.

Name: Primary Health Care (Phase 2)

Number: 028

Proponent: Salvation Army PNG

Sector: Health: Primary

Location: Central Province, Eastern Highlands Province

Duration: July 2004 to July 2007

Expenditure: K5,160,730

Program description: Improving health facilities and facilitating trainings and workshops for the villages.

A safe delivery.....

This woman rejoiced after the birth of her child, assisted by a trained Village Health Volunteer. She said, *'My first baby was born in the village without trained help and died at birth. My second baby was born in the dinghy on the way to hospital and I was very frightened. This time I had the help of a trained lady in my own village who I know and trust, and I felt relaxed and happy'*.



A safe delivery.

Launakalana Primary School (Central Province)

The Launakalana Community Development Committee decided to focus the practical part of their carpentry and general building maintenance courses into renovating classrooms and making school desks. Children are all now sitting in good classrooms and at desks for the first time in the school's 20 year history.

One teacher commented, *'We did not think anyone cared about us here, now we know that our community and others do care and that really helps us continue to teach in these isolated places'*.



Launakalana Primary School.

One student's dream....

The dream of one young boy has been repeated hundreds of times throughout the Salvation Army health phase 2 program areas.

The boy dreamed of sitting at a desk to do his school work. One day he saw a truck approach the school carrying desks. His heart jumped as he thought his dream had come true but the truck did not stop.

Then, just when he thought he would never see his dream become a reality, some men and youths from his community got together and learnt carpentry skills and decided to make desks. He saw his dream being made before his very eyes.

He said this was even better than the truck load of desks as, *'We made it happen for ourselves'*. His pride was obvious as he at last sat at his long dreamed-of desk.



Students sitting at new desks.

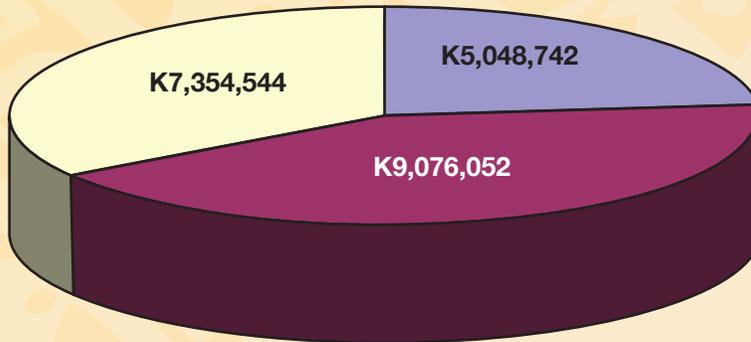
Gender Development

PNG women and girls have fewer opportunities and experience a much lower access to secondary or tertiary education than men. Without this education, employment opportunities are reduced. Women are mainly responsible for growing food for their families, generally suffer poverty and often, violence.

Gender promotion and awareness training was an integral part of all APNGIF programs. Many programs had specific gender outcomes such as upper secondary and nursing education, opportunities for small businesses in agriculture, improved health and other services in villages and better access to safe water.

The APNGIF also focused on building capacity for women by encouraging their participation in the implementation of funded programs. Of the 39 program awards funded, 10 were programs managed by women including PNG nationals. Women were included in village water management committees and targets were set for women's participation in training.

Total actual spending K21,479,338



- Marianville Secondary School
- Mercy Secondary School
- Notre Dame High School



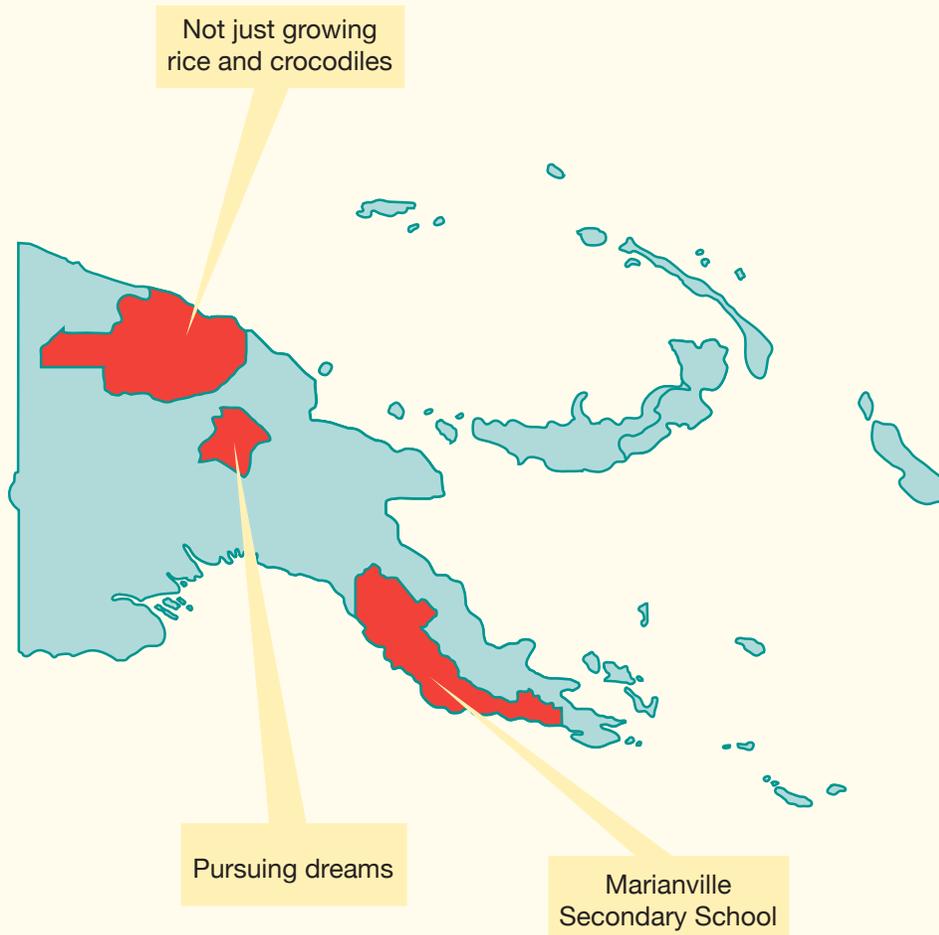
Refurbished dormitory block - Notre Dame High School.



Agricultural lesson - Notre Dame High School.



Balancing lake - Mercy Secondary School.



Stories on Gender Development in this book

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- 1. 007 Marianville Secondary School 145

Pursuing dreams

‘There is a different atmosphere in the school. There is a very serious academic atmosphere now. They are there for an education. I think there is something happening at the school for these young girls. We could never have had them at secondary level without what we received from the APNGIF’.



Seedling development in the new agriculture block.

In 1961 the Sisters of Notre Dame were invited to the Mt Hagen Archdiocese to educate Western Highlands' girls. Shaping and nurturing young women of tomorrow spiritually and educationally, is still the goal of Notre Dame High School, established in 1969. Now a secondary school, Notre Dame is one of only four in Papua New Guinea offering secondary education exclusively for girls.



The teachers and local community achieved almost everything they had dreamt of for the school. Infrastructure and resources were provided for 140 grade 11 and 100 grade 12 students. Specialist classrooms, an upgraded library and computer laboratory, rural technology and home economics blocks were built as were teacher houses. Dormitory spaces were increased by 75% from 107 spaces.

The transformation took two years from June 2003, and APNGIF funding of K7 million.

In early 2008, Sister Mary Vivette, Principal of the school, discussed the impetus and first steps taken to upgrade the school:

'I wanted to do something for our girls. They were getting the same grades as boys, but they were not getting into Grades 11 and 12, because there were so few dorms for girls. In our Province there is always the priority for the boys, two to one. And it just wasn't fair. So I thought that Notre Dame could help. Now they can continue their education and have the opportunities that the boys have.

We started working with the local people. They signed papers in support of us. Then we got a committee together, local people, missionaries, teachers and other educators. We came together and we just dreamt. We dreamed of everything we could do to make it a wonderful place for young women, because my feeling is that they have only the period of time at high school when they are free to be themselves. After that some of them have very hard roads to go'.

It took Notre Dame a long time to finalise their proposal, submitting one which was too ambitious. They were advised to scale down and try again for funding. This they did and in 2002 were told they could go ahead.

Sister Mary Vivette quickly had to become skilled in how to oversee a large infrastructure project. It was very different from the expertise needed to run a girls' school.

Nevertheless she was excited by the possibilities and rose to every challenge. *'When we called for tenders for the project there were 17 buildings altogether plus the supplies and equipment. The tendering process was something beyond me. We asked the Tenders Board for a Project Manager. We were not forced to take the lowest tender, we were allowed to say 'this company has this kind of reputation, this experience'.*

Once a building contractor had been appointed, the Program went ahead quickly and the first grade 11's were enrolled in 2005.

PROGRAM DETAILS

Name: School Upgrade Program

Number: 026

Proponent: Notre Dame High School

Sector: Gender Development

Location: Western Highlands Province

Duration: June 2003 to October 2006

Expenditure: K7,354,544

Program Description: Construction of new school buildings and facilities, and accommodation for staff.



New library block.



Pondering the working of the generator.

'The builder had people out on site and then he had people in Mt Hagen prefabricating the houses. He took a pride in his work, he has a real sense of art, putting the colours together. We would walk around once or twice a week. Peter would know the dimensions and I would know what I wanted. Because we had the basic designs we had something to work with.

He had good workers who worked hard and we got everything in place. I was able to work on getting the books and equipment. So everything was there by the time the school opened in 2005. We got practically all our original dream, everything except our little theatre. Everything else we achieved'.



Refurbished dormitory block.

The importance of community engagement

Everyone knew how important it was to keep the local community engaged in, and proud of what was being achieved. The contractor also recognised this.

'The contractor hired local people, as many as he could of experienced men, so that was good for the community. And the people were very supportive. Instead of having to get out big machinery they came in and straightened the land for us.

And then we were all ready for the girls. The parents know that education is important and the local people are growing in their evaluation of education'.



Students in one of the new classrooms.

Growth in student numbers

Since 2005 and the first intake of grade 11 overall student numbers in the school have climbed from 497 to 628. Grade 11 numbers in particular have shot up above the planned 140 students.

Student enrolments, 2005-2007

	2005	2006	2007
Grade 11	103	129	177
Grade 12	Nil	106	101

Source: Notre Dame High School.

The Principal reports that numbers are higher again in 2008. Staff are proud of the contribution of Notre Dame (and the APNGIF program) to senior secondary education for girls in PNG.

'This year (2008) the school is up to 645 including 178 grade 11 students. So it's growing, it's wonderful. The Program has really helped the women of the Western Highlands and the whole country actually'.

Student achievements

The students have been achieving better marks with the improved facilities. The claim is verified by Department of Education data which shows that 2007 examination mean scores for grade 12 at Notre Dame High School are generally higher than in 2006, the first year of enrolling grade 12.

- exam means were higher for chemistry and biology, perhaps because of the new science laboratories and the ability to run experiments
- other increases were seen in Language and Literature, Mathematics B, Geography and History
- in the 2006 National Higher School Certificate (HSC) exams 89% of Notre Dame grade 12 students passed
- in the 2007 HSC the proportion had increased to 92%.

Of particular note is the remarkable number of Notre Dame 2007 grade 12 students who not only passed but were accepted into tertiary education, 67% in total. This is extremely high in PNG, even better than 2006, when Notre Dame received congratulations from the Office of Higher Education. *'I would like to congratulate Notre Dame (Sister Vivette and staff) for the excellent results last year considering 53% of pioneer grade 12 students were selected to tertiary institutions'.*

Pragmatic approach

Notre Dame does not expect all of their girls to go on to tertiary education. Their curriculum includes pragmatic courses which can help support young women who choose to go back to their villages after graduating. Rural technology includes practical agriculture and aquaculture lessons. Domestic science includes sewing and cooking.

The students produce food for the school as well as learn how to be self-sufficient within their villages. The APNGIF program ensured that the school was well equipped to teach at the required standard. A student said, *'Previously we were working only with spades and knives. Now it is really great having our own building and having the tractor. We are really enjoying it and looking forward to having many garden foods in our dining hall'*.



Pride of place in the new rural technology building (nursery to right of door).

The Agriculture teacher was pleased with the resources and facilities and said that these had enabled them to teach about new crops. *'Now we have a building of our own and space for storage. At the same time we got new textbooks. Now we are introducing some new crops like wheat and rice. So after the APNGIF came we are well equipped and students are learning new things'*.

The atmosphere is conducive

The atmosphere for learning has changed. Staff believe students now have a serious and ambitious approach to study, in part brought about by pride in the upgraded school.

'There is a different atmosphere in the school. There is a very serious academic atmosphere now. They are there for an education. The statistics last year showed we went up to 65% going on to tertiary institutions, it is really gratifying. I think there is something happening at the school for these young girls. We could never have had them at secondary level without what we received from the APNGIF'.

The determination of one student

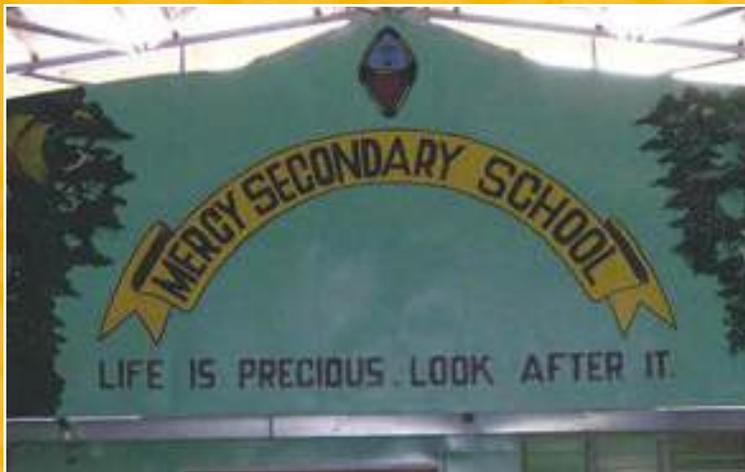
The determination to do well and gain tertiary education is noticeable at Notre Dame. The Principal related a story about one young graduate who worked hard to raise money for university fees.

'Rebecca Kai is an extra-ordinary young woman. She was very sickly in grade 11 and 12. She's a local girl, a day student. Her mother would call at 9.30 each night in the dark to walk her home, so that she could stay for night study. She got two different offers, from UPNG and Divine Word University. She did fantastic work, but what really struck me is that she didn't come for her certificate right away. She came two weeks late and I said, "Where were you?" She said, "I was selling my potatoes in Lae". She made K4,000 selling her potatoes for her education. She is just a fantastic girl, she was very sickly but she studied every night. It was really something and she really got the pay-off.

So they have their dreams and they are really pursuing them, they are not just sitting back. I think it is a result of the atmosphere we have at the school now'.

Not just growing rice and crocodiles

'I demonstrate and then I tell them, there is nothing wrong with it. I have gone into the water. I will not die, I do not think you will die, you are strong and big enough, you are healthy. You just come down and we will plant the rice'.



Life message in the new mess hall.

Mercy Secondary School (Yarapos) in East Sepik was founded in 1963. Since then more than 4000 girls have been educated there, initially up to grade 10. To continue to grades 11 and 12 the girls had to move to other institutions, often out of the Province.



For Mercy to effectively respond to PNG's education reforms and offer grade 11 and grade 12 subjects, specialist teaching facilities were needed. From late 2003 to late 2006, Mercy Secondary School spent K9 million on a major upgrade. The objective of the APNGIF-funded program was, 'To meet the demand of the Education Reform and provide the infrastructure necessary for the upgrade of the school to secondary status and increase student numbers'.

The Program included science laboratories, more and better classrooms, a library and computer facility, teacher and student accommodation and improved electricity and sewerage systems.

The large sewerage system, one of the most sophisticated in PNG, involves waste moving through a septic tank into an aeration pond, then filter beds to an absorption pond and finally into a balancing lake. By that time the water is re-usable.

There were many delays in completing the system. An environmental impact study was conducted to ensure the local creek was not affected. The first septic tank was poorly built and partially collapsed but, with tenacity, the school successfully completed the huge task.

Using sewerage pond water for rice

In an unexpected innovation, the processed water is now used in paddy fields to grow rice. The irrigated paddies are supplying the school with all their rice. With three harvests a year, the last harvest in 2008 reaped 500 kg – enough for the school and surplus to sell to increase the school's income.



Balancing lake at Mercy Secondary School: the water is swimmable.

The head of the Department of Agriculture at Mercy tells of realizing the potential for the processed sewerage. *'We are very keen on rice cultivation. We have upland rice without irrigation, and we realised that with the AusAID project there was plenty of water. Our farm is situated next to the sewerage ponds, so we have initiated some paddy fields.'*

We got advice from a person working with the National Agriculture Research Institute (NARI). He came over and helped us in organising the dedicated paddy field.

Rice needs a lot of water. The waste water is very good because it contains a lot of nutrients. We have about 16 paddy fields, 14 already planted with rice.

Our plan is to build more paddies, use the sewerage system water and grow more rice. We are already able to sell surplus rice and gain a little more income'.



Irrigation at work in a rice paddy at Mercy Secondary School.

PROGRAM DETAILS

Name: School Upgrade Program

Number: 024

Proponent: Provincial Education Department

Sector: Gender Development

Location: Wewak District, East Sepik Province

Duration: November 2003 to October 2006

Expenditure: K9,036,702

Program Description: Construction of new school buildings and facilities, accommodation for staff and students and improved electricity and sewerage systems.

Setting an example

Understandably, the students were concerned at the idea of paddling around in water from the sewerage system. The agriculture teacher had to be a role model.

'When you ask them to work in a paddy field filled with sewerage water, they say, "I do not want to", or "it does not smell nice, we should not go in there". As teachers we lead by example, so I must demonstrate. I must get into the water and start planting or even harvesting. I must do that first. And then I tell them, there is nothing wrong with it. I have gone into the water. I will not die, I do not think you will die, you are strong and big enough, you are healthy. You just come down and we will plant the rice'.

Crocodiles

Where do crocodiles come in?

In 2007 the school decided to introduce a fish farm to one of the ponds and a small number were harvested in that year. Perhaps the presence of fish attracted crocodiles to take up residence. During a site visit to Mercy in 2008, APNGIF Development Specialists spotted two baby crocodiles in the balancing pond and two larger ones in the aeration pond. Luckily, those students brave enough to swim do so in the balancing lake.

Not just rice and crocodiles

It's not all agriculture and aquaculture. As one of the only four all-girls secondary schools, Mercy has a very strong commitment to higher education for the young women of PNG. The improved facilities and larger and better dormitories are part of a sustained effort to have more girls continue into senior secondary school. Thanks to the upgrade, the girls are now able to focus on higher studies and graduating with good marks. Mercy's reputation is spreading and there is an increasing demand for places.

The overall student numbers (grades 9 to 12) at Mercy Secondary School increased from 514 in 2004 to 680 in 2007. The vast majority are boarders, stressing again the importance of good dormitory accommodation. The number of grades 11 and 12 students rose from 162 in 2005 to 211 in 2007.

Grades 11 and 12 enrolments at Mercy Secondary School 2004 – 2007

Grade	2004	2005	2006	2007
Grade 11	72	82	79	123
Grade 12	n/a	80	88	88
Totals	72	162	167	211

Source: Mercy Secondary School.

In 2006 the first signs of improvements in academic performance were observed, probably as a result of the vastly improved resources. In 2007 Mercy 'topped' the other two Sepik secondary schools in most subjects. One of the year 12 students had this to say,

'A big thank you to the APNGIF for the project. We are really grateful for what you have done. It has benefited us and I know that many students who come through here will be proud that they have had a chance to come to Mercy Secondary. Thank you'.



Two Mercy Grade 12 students talk about academic achievements.



Education

Education

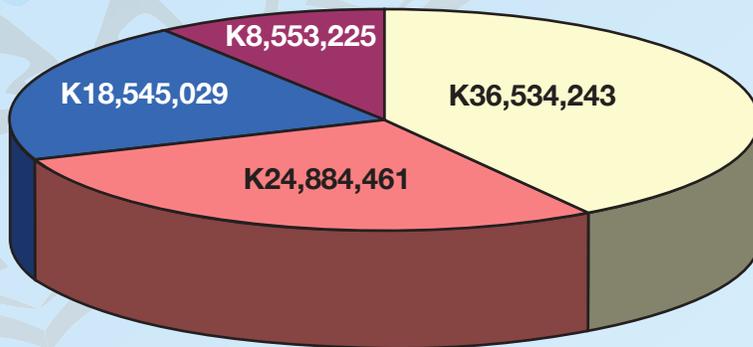
Within education the focus of the 1997-2002 PNG MTDS was on curriculum development, teaching numbers and standards and upgrading buildings and equipment. From 1996 onwards PNG commenced dramatic reform of secondary schooling with high schools phasing out grades 7 and 8 and introducing grades 11 and 12.

To teach grades 11 and 12, specialist classrooms and facilities for upper secondary education curricula were badly needed across the country. The PNG target was for 50% of students to access grades 11 and 12. Six APNGIF programs responded to this with the provision of science laboratories and other specialised classrooms, dormitories and teacher houses in three co-ed and three all-girls' secondary schools.

Not all children in PNG go to school. The PNG MTDS 2005-2010 focuses on basic education in response to the call for education for all. In response, the APNGIF funded improvements at a large number of primary schools and two which supported adult education.

Two major tertiary institutions have received funding which has ensured an impact and influence beyond Papua New Guinea.

The total spending in education (all sectors) was K88,516,958 million.



- Basic education
- Tertiary education
- Secondary education
- Adult education



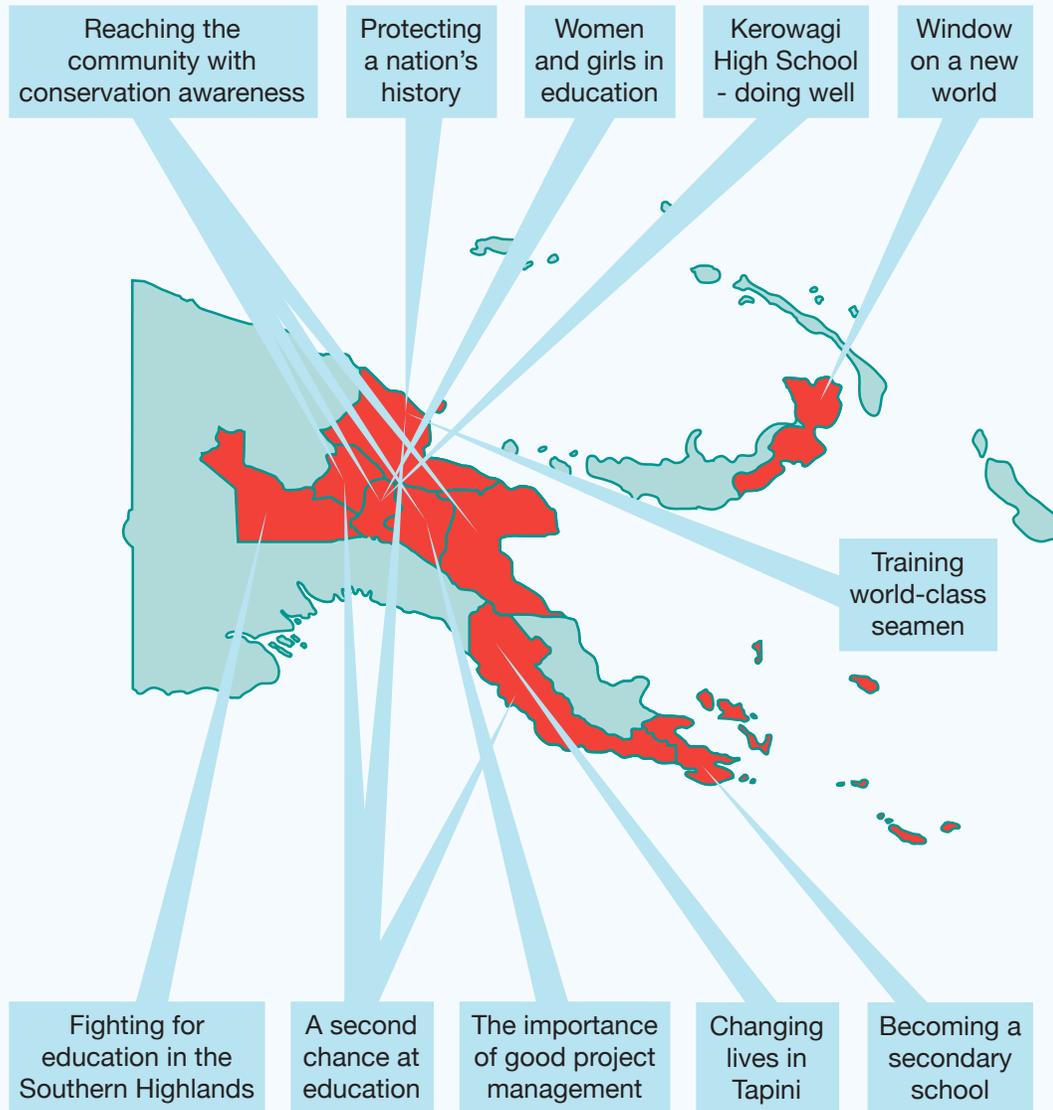
Students learning hoe use computers - Tapini High School.



Students at Kerowagi Secondary School.



President and student - DWU.



Not all programs in the Education Sector have stories in this book but details are provided in the appendix.

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Window on a new world

‘Mi improv long ol wok long mi long skul
komparim long ol yia bipo. Mi hamamas na
mipela i lainim planti’.

(My schoolwork has improved. I am happy I am getting
better results.)



Two new classrooms seen through the window of the old.

The Pomio district on the south coast of East New Britain is one of the most remote, under-developed and inaccessible areas within the Province. Since the small airport at Palmalmal closed, access is only possible by sea. Even this is dangerous to impossible during the windy season.

The purpose of the APNGIF program was, *‘To provide appropriate educational facilities to rural areas in the Pomio District of East New Britain, which will enable basic (primary) schooling to be provided for all children in the region’.*



A reform in the PNG education system at the primary level has focused on relocating grades 1 and 2 to elementary schools and establishing grades 7 and 8 in primary schools, which now run from grades 3 to 8. Many primary schools required upgrading to provide extra space for students and to cope with a new curriculum for all grades.



Sea access on a tranquil day.

The APNGIF provided K6.3 million to the East New Britain Department of Education to help upgrade some very remote schools. Five primary schools were selected, Makaen, Malakur, Pomio, Uvol and Guma. The work started in late 2001 and continued to the end of September 2006.

Each school received new staff houses, classrooms, administration and library facilities and ablution blocks as well as a generator. Three received dormitories and two received a new kitchen and mess hall. The Provincial Department of Education said, *'The upgrade is about the long term development of our children. It's easy to demonstrate the advantage of education'*.



Staff houses built in Pomio District.

More students

The confidence of the Provincial Education Advisor seems justified. There are more students enrolled at four of the five schools, Malakur, Makaen, Guma and Uvol.

The principal at Guma Primary said, *'Since the new facilities have been completed the school has had additional students transferring in at grades 7 and 8, so that now half the students enrolled at the school are those in grades 7 and 8'*. He also added that, *'The school has had to turn away many more applicants because of lack of spaces'*.

Throughout PNG boys traditionally are chosen over girls when a family can only pay one set of school fees. In some cases other cultural expectations support the education of boys over girls. In 2004 girls made up 45% of national enrolments in primary schools.



Girls in one of the new classrooms.

PROGRAM DETAILS

Name: Educational Facilities Development Program

Number: 008

Proponent: Provincial Education Department

Sector: Education: Basic

Location: Pomio District, East New Britain Province

Duration: October 2001 to September 2006

Expenditure: K6,338,408

Program description: Construction of new staff houses, school buildings and facilities.



In this program, 3 schools received a student dormitory – Guma, Uvol and Pomio. Although accommodation for girls increased, Uvol Primary is the only school which shows a consistent improvement in the ratio of girls to boys between 2002 and 2006. Malakur has done well with more girls than boys enrolled each year, but the other four schools are either the same as or slightly above the average of 45% girls.

It's not just accommodation which is encouraging girls' participation. The Provincial Council of Women said that with the provision of more classrooms, classes can be split. Separate sex and life skills education has, 'Greatly improved attendance and improved the quality of the lessons conducted'.

Better marks

Academic improvements are evident at each of the five program schools. A library, science labs and good classrooms all combine to help the students. 'Mipela i save yusim nupela laibreri long skelim ol wok'.



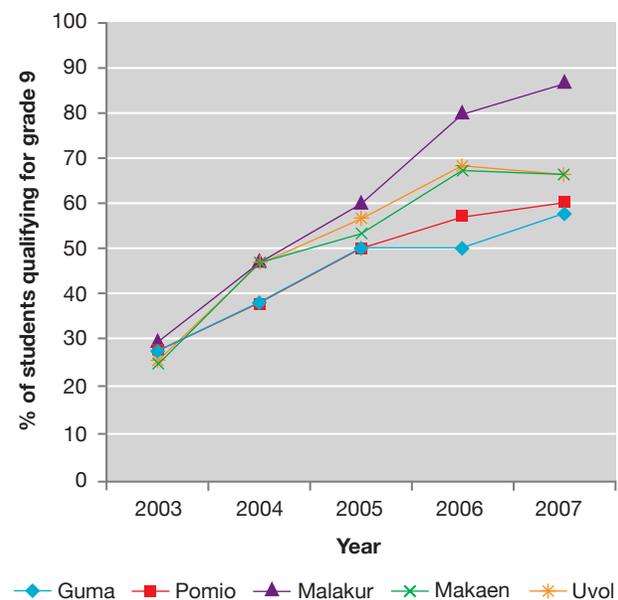
New home economics classroom.

The national target transition rate from grade 8 to grade 9 (*A National Plan for Education 2005-2014*) is 50%. Not everyone who qualifies to go on to grade 9 will gain a place. But the students of the Pomio district are qualifying in greater and greater numbers.

The Provincial Education Authority says, 'There has been a great improvement in student academic performance at these schools, due to the improved learning environment and the provision of specialist facilities for science and home economics'.

In particular the number of students from the five schools now qualifying for secondary school studies is rising consistently. In 2003 the highest proportion qualifying was 40%. By 2007 four of the five schools had over 60% qualify and at Malakur the figure rose to 86%!

Grade 8 Results
(expressed as % of students qualifying for grade 9)



Source: East New Britain Department of Education.

Community pride and sustainability

Sustainability is always an issue for APNGIF and other donors who fund major building programs. Often the Provincial Government is left to maintain the infrastructure, without actually having a budget for this. Future funding will see much more collaborative planning around donor organisations and provincial budgetary constraints. In the meantime, the communities around the five schools are looking after their own.

According to an Elder,

'Now we have expensive classrooms, worth millions. All of us here never saw a million before or maybe again. How are we going to maintain this? From now on we must all plant cocoa trees, at least 20 a family, to sustain it'.



Students outside their new classrooms, March 2006.

Women and girls in education

‘Ninety percent of our women here are not educated, or just educated up to grade 4. It is an eye-opener for them to see these classrooms and realize that their daughters can have this. This is positive for their future’.



Miunde Primary School, students showing their appreciation for the new classrooms.

In Papua New Guinea there are many difficulties facing girls who wish to start and remain in school.

Girls are traditionally much less able to access primary education than boys, for economic and cultural reasons and (often) safety concerns or a lack of appropriate female facilities.

The Simbu Provincial Government, *‘Recognises the importance of girls’* and has an accelerated education policy that helps girls reach grade 10 by paying fees where necessary.



‘Simbu is a good place where many girls can go to school. This is not like in other highlands regions. The status of primary education in Simbu has improved as these schools have become better. The Program is providing better opportunities for girls to get more education’.

In 2001 the Simbu Provincial Government submitted a proposal to improve primary school infrastructure in Simbu. In phase 1 of the APNGIF program 18 of the 267 Simbu primary schools in greatest need were selected for support. Ten double classrooms and 26 staff houses were built in four districts at a cost of K3 million.

Phase 2 began in September 2004 when 38 schools were identified for support, including some from phase 1. A further K7.5 million was provided and 43 houses and 21 double classrooms were constructed.

Women teachers

It was said by one headmaster that high achieving teachers completing their training are now considering Simbu schools because of the new houses and classrooms. In the past, this was not the case with the teachers preferring to go to better equipped and less remote schools.

During an evaluation visit the APNGIF team spoke with the vice-president of the Provincial Council of Women in Simbu.

'I was the librarian at the Education Office when Lawrence (Koni) was writing the proposal. We talked and shared ideas. We did give him our ideas, for example that rural women teachers need housing'.

The bottom line is housing

Women teachers face many difficulties, never more so than in rural and remote schools where housing is usually very bad. The new houses were allocated by the Boards of Management for each program school. Allocation was by seniority and this favoured the male teachers. Only eight of the 26 phase 1 houses went to women.

The need for women teachers to have better houses was explained by the Council of Women.

'For women teachers in Simbu it is a very big challenge. They are in college OK but when they become teachers many do not want to go to rural areas because of bad houses and bad roads. This is especially hard for women. Some are not married but have children. They need a good place to live. The bottom line for them is accommodation. For the last 30 – 40 years they have been in run-down buildings'.



A new house at Moroma School with corner of old house on the right.

PROGRAM DETAILS

Name: Primary Infrastructure Development Program (Phase 1)

Number: 010

Proponent: The Simbu Provincial Government

Sector: Education: Basic

Location: Simbu, Simbu Province

Duration: August 2001 to December 2002

Expenditure: K3,250,100 + K30,000 (met by SPG)

Program description: Construction of new staff houses and classrooms.

Name: Primary Infrastructure Development Program (Phase 2)

Number: 030

Proponent: The Simbu Provincial Government

Sector: Education: Basic

Location: Simbu, Simbu Province

Duration: August 2004 to September 2006

Expenditure: K7,439,992

Program description: Construction of new staff houses and double classrooms.

At Dumun, women teachers spoke up and said how much they needed the houses. At Agugu, a female teacher said, *‘Good learning depends on a good environment’*.

Female teachers see the APNGIF program as a good project. They want to make sure that the new buildings are cared for. Their interest is in sustainability for the retention of good teachers and a good education of the local children. *‘They are new now, but later who will maintain them? These houses are for the teachers. The buildings are really important to us. Female teachers need to have a good house. The children are learning in buildings and they need to be proper’*.



New classroom at Bawi School.

Getting girls into school

Many stakeholders have said that a lack of appropriate facilities or poor infrastructure is a deterrent for girls hoping to enrol in primary school. The APNGIF program classrooms have heightened interest in girls’ education.

Data provided by the Simbu Department of Education at the time of the evaluation of the phase 1 program, showed that in a sample of eight phase 1 schools which received a new double classroom and a new staff house, the number of girls enrolled had increased between 2001 and 2003. Teachers believed this was because girls were more comfortable in the new surroundings.

Increase in enrolment of girls at eight program schools

School	2001	2003	+
Movi	56	78	22
Fikobaro	146	162	16
Agugu	149	155	6
Mu	54	68	14
Konoma	63	76	13
Dumun	96	105	9
Baregigl	96	110	14
Mirane	154	166	12
Rise in numbers 2001 - 2003			106

Source: Simbu Provincial Government.

The Provincial Council of Women and local mothers believe new infrastructure can be a catalyst for better education for girls in particular. Their appreciation of the APNGIF programs was strong.

‘Ninety percent of our women here are not educated, or just educated up to grade 4. It is an eye-opener for them to see these classrooms and realize that their daughters can have this. This is positive for their future.’

We are the mothers, we must be educated. We want more. We want this program to expand. It is a good program. I truly believe in it because of the community benefits’.

Changing lives in Tapini

‘Our people are subsistence farmers. We are Goilalas from the mountains. This is something very new and exciting. We were village people with no power, phones, and computers. Now we have all that’.



Students learning how to use computers in the newly equipped laboratory.

Tapini is a small district township located in a rugged mountainous area approximately 30 minutes flight from Port Moresby. The only other means of access is by walking from the nearest road, approximately 40 km. It is the government centre for the Goilala District of Central Province.



Tapini was once thriving. From 1964, it was powered by a micro-hydropower system and from the late 1970's a road connected it to Port Moresby providing an outlet for the wide range of agricultural produce in the area. However, in the 1980's the hydro power and the roads were lost to landslides in the rugged terrain. The once prosperous District Station and township fell into rapid decline as businesses closed, government services cut back, and young people left in search of employment.

The Catholic Diocese of Bereina took over the management of the Tapini High School from the province in the late 1990's. The school is the only secondary education facility in the district and is the biggest community within the village area. In 2005 the Diocese received funding of K7.4 million from the APNGIF for an Integrated Development program at Tapini.

The objective of the Program was to develop the existing education facilities at Tapini High School, to re-establish a hydro-electricity supply and to upgrade the town water supply. The basis of the Program was the need for better learning opportunities and social improvement for the people of Goilala.

At the school, eight classrooms, the administration block and boys toilets were upgraded. Extensions were made to the practical skills and the home economics buildings, a teacher's house and boys' dormitories. Five new teacher houses were built, plus a rural technology building and two classrooms, and student toilets. In the surrounding community, the water supply was upgraded and a

water storage tank installed. Once civil, land and geo technical surveys were done, a hydro power system was built, a standby generator installed and the community's electrical reticulation system was upgraded.

The rugged terrain, the lack of road access and the small airstrip made this project difficult and expensive to implement. All construction materials and equipment were flown in on small aircraft able to take only a few hundred kilos at a time. Some equipment required airlift by helicopter. On site, the community had to be mobilised to move heavy materials and equipment by hand, often up steep mountain sides and gullies. When the charter with the turbine arrived people from the whole district came to help. The story of the turbine transport to the site demonstrates this sense of cooperation and identification. *'We drove the turbine on the tractor. Then the youth rolled it the rest of the way. They worked all the night to get it to the place. Then they left it with the engineers from Tasmania and said, 'now you install it.' But they never left them. They helped them and it took two days to install'.*

PROGRAM DETAILS

Name: Integrated Development Program

Number: 036

Proponent: Tapini Diocese

Sector: Education: Basic

Location: Goilala District, Central Province

Duration: May 2005 to October 2007

Expenditure: K7,428,850

Program description: Develop school and all other basic services in the areas.



View from teachers houses over school and airstrip to the end of the valley.



Locals digging the penstock trench.

Connected again

The re-connection of the community to power has changed lives. For the first time the community school has electricity, and the health centre, police station, the District Government offices and Treasury, and of course the high school and diocese buildings, are connected. The provision of power has meant:

- lighting at night around the public areas, market place and road beside the airstrip with the market now trading at night
- new possibilities for small businesses for women in particular, with sewing and cooking
- students can now study at night
- the restoration of telecommunications (with extra funding from NZ Aid the power was extended to the Telikom repeater station) with internet, email and a public phone at the Post Office
- improved entertainment with television, reduction of boredom-related unsocial behaviour
- a greater willingness of teachers and government officers to work and stay within the community.

Water

The airstrip runs through the centre of Tapini from one end of the small valley to the other.

New water pipes were installed from two water sources with a separate line running from each source down each side of the airstrip. One line connected the church buildings and school, the other the Community School. The old reticulation system still supplies other buildings at the station. The water has provided:

- improved ablution and cooking facilities at Tapini High School
- better functioning of the community school septic toilets
- improvements in health from fewer skin problems and a reduction of diarrhoea, malaria and bronchitis cases
- a public water outlet for day students and women from nearby villages to use.

The improvements at the school

The basic aim of the improvement at the high school was to move the school from an academic base to offering trade skills and artistic expression. The focus on practical skills was widely endorsed in the community. The basic technology facility and the tractor were considered very suitable.

‘Our people are subsistence farmers. We are Goilalas from the mountain. This is very new and exciting. We were village people with no power, phones, computers. Now we have all that.’

Pictures from left to right:

1. New hydro power station set in steep mountains near Tapini Station.
2. Working out what next for the water supply.
3. The old and the new classrooms.
4. Tapini students gathered outside one of the new buildings.



1



2



3



4

The school now provides education in rural agriculture, fine and expressive arts, home economics, computing, and sewing. All students take intensive courses in computing for beginners.

Women in the community see that their children can now be educated in a practical environment. They realised the value of computer skills, or for their daughters to learn how to use a sewing machine. The new practical courses could lead to small projects and the hope that some of the young people might come back to the community. *'We hope that this will bring our children back so that they can stay in the village. We can work together, but they must have something to do'*. Some students have already decided to put their skills to use by staying in their villages and introducing cash farming, after leaving grade 10.

Improvements in the community

There have been some marked improvements within the community. The community spirit engendered by the Program has lingered. Community members say law and order has improved and there is a greater respect for property. The area is cleaner, particularly around the market where people gather each day.

Environmental impacts

Overall the APNGIF program has resulted in a significant and positive environmental impact through the renewable energy system. Diesel power generation has a number of levels of environmental impact. At the local level the

primary impact is waste oil disposal. In an area such as Tapini there are no organised environmental dumps that can safely accommodate the waste. At the school level the problem of waste oil has virtually been eliminated with only occasional diesel generator use expected. In addition, the noise pollution of a generator has been eliminated with the lower noise levels of hydro power.

Another environmental spin-off of the hydro system is a reduction in the demand for firewood. The whole cooking system at the school has been electrified. Previously, the cooking relied on firewood and every few days students collected wood to fire the boilers. It was estimated that the equivalent of about two small trees a week are now saved.

Pictures from left to right:

5. The market at Tapini.
6. The new Expressive Arts building with landscaping.
7. The new Expressive Arts building.
8. One of the new classrooms in the science block.



5



6



7



8

Reaching the community with conservation awareness

'There is not much information about our fauna and flora in this country... we found people are really interested to know what they have in their area and why they need to protect it. Because of what we have done we realise that we need to educate them'.



Resource materials used by RCF.

The Research and Conservation Foundation (RCF) has been involved in conservation education activities since 1999. Originally, the Wildlife Conservation Society (WCS) began the Program and invited RCF to assist in its delivery. During the APNGIF funded period, the WCS contribution was completed and their direct involvement in the Program ceased.



During the early years of the Program development, WCS and RCF lacked the funds to consistently deliver their initiatives on a scale that could have any real impact on teachers and students. The APNGIF addressed this.

RCF have worked alongside the national curriculum reform process in PNG. The staff has been closely involved with the Curriculum Development and Assessment Division (CDAD), as the curricula and the teaching methodology at all levels, elementary, primary and secondary, have been developed.

RCF in Goroka (Eastern Highlands Province) has successfully completed two APNGIF funded programs since the beginning of 2002.

In phase 1 funding of K2 million built a new central Conservation Education Resource Centre (CERC) in Goroka and satellite CERCs in Western Highlands, Simbu and Morobe. As well:

- over 500 primary school teachers from Eastern and Western Highlands, Simbu and Morobe have been trained in using the RCF resource materials and 592 have been provided with the teacher resources
- 92 University of Goroka (UoG) students have taken the RCF diploma course and are now teaching throughout PNG, the Solomons and Vanuatu
- nearly 900 sets of resource materials were printed and a mailing list of 1000 now receives a regular RCF newsletter.



Western Highlands teachers at Workshop in the new CERC.

Phase 2 funding of around K4 million built a Transit Haus for accommodation and allowed teacher training to continue as well as generate a small income to support RCF activities. There was further production and distribution of innovative conservation education materials to raise awareness in schools and communities of conservation issues. The RCF resourced other NGOs, University of Goroka and Balob Teachers College with conservation education materials, *'To strengthen conservation awareness nationwide'*.

The APNGIF spoke with RCF and UoG staff in July 2008. Several big achievements were identified:

- the RCF course at UoG has expanded to include the science faculty and social science faculty students, doubling the number of final year trainee teachers doing the course
- in 2007 the course was replaced by a full diploma course based on conservation education – the Diploma in Environmental Studies
- there are now plans to upgrade the diploma course to a full degree course, using RCF materials.



A view of the accommodation block for visiting teachers or researchers.

PROGRAM DETAILS

Name: Conservation Education Program Phase1
Number: 009
Proponent: Research and Conservation Foundation
Sector: Education: Basic
Location: Eastern Highlands, Western Highlands, Simbu and Morobe Provinces
Duration: November 2001 to December 2004
Expenditure: K2,912,749
Program description: New central Conservation Education Centre and satellite centres and develop conservation education at all levels.

Name: Conservation Education Program Phase 2
Number: 034
Proponent: Research and Conservation Foundation
Sector: Education: Basic
Location: Eastern Highlands, Western Highlands, Simbu and Morobe Provinces
Duration: May 2005 to July 2008
Expenditure: K3,154,516
Program description: Provide conservation materials, training and support for teachers in EHP, WHP, Simbu and Morobe Provinces and a new Conservation Education Resource Centre in Morobe.

Funding from the APNGIF was the major impetus in the work of the RCF, and its increasing influence in the world of conservation education in PNG.

'I do not think we would have come this far and we would not have been recognized within the NGO network, if we did not get that funding from APNGIF. From the certificate course that we were offering, (at University of Goroka) because of the success of the course, we were invited to give a full diploma program, and now there are plans to develop it into a degree in the near future.

We are in the second year and we are already getting a lot of interest, we have currently about 12 students who have signed up for the diploma program. But the diploma course is structured in a way that some of the units that we are teaching, even the science students are interested. At the moment we have about 23 science students who have actually signed up'.

In discussions with the APNGIF in 2008, the Head of the Melanesian Studies Department at the University said that enquiries for the course had reached 2,000. Clearly there is a strong and growing interest in conservation studies to which the RCF is contributing beyond their original expectations.

Schools outreach

The RCF included outreach visits in their primary schools work, adding to and supporting the role of the RCF-trained primary teachers.

'With the school outreach project, we go to schools and we set up projects for them, for example a green house net where they plant their trees. Communities are getting involved, their parents are also involved. After nursery-ing their seeds, the project that we set up for the school, the parents come and pick up trees from there and they are planting in their village'.

Students are starting to take initiatives of their own. *'A student wrote a letter and asked us to supply him with some tree seedlings. By then he was doing reforestation in Grade 9 at one of the high schools. I said, come and see us, we have some left-over seedlings. He came and took the seedlings away. He started growing in his own backyard. Then he asked me to write him a support letter because he was seeking additional funding for his community from his local member, so that he could expand that work. I provided a support letter for him. I think that is something positive and getting somewhere'.*



University of Goroka students in a group discussion.



Two students with nursery trees.



Students at the Goroka CERC.

Community outreach

In Phase 2 the RCF was able to go direct to communities as well as to schools. This has proved very successful and RCF is seeking funds for a third phase. The RCF Manager said,

'We have reported our approaches, because in future, we will not do our teacher training at our provincial headquarters. We will look at the district level because of the feedback we have got from this activity'.

'In the next funding, we have incorporated community environmental training as well, we might go out to the local communities. That is a positive thing that came out of this and that is our way forward.'

I get really excited when I find that people want to learn more so it is really good. There is not much information about our fauna and flora in this country, not much has been disseminated. And we found people are really interested to know what they have in their area and why they need to protect it. That kind of message did not really get to people in the past, but because of what we have done we realise that we need to really get back to the community and educate them about what they have to gain in the local environment and why it is important to protect them. So yes, it has really been exciting'.



Greenhouse nursery at Korefeigu School.



Students making animal sounds, Ketaboro school.

The importance of good project management

'They came in their hundreds, they got up at 5 o'clock in the morning, they walked to the school, they walked to the Kerowagi station, they loaded building materials onto their shoulders and they walked back up the mountains singing as they climbed, rejoicing. It was about 8 kilometres up hill. It was inspiring'.



New powered classroom at Merane Primary School where students study at night.

Simbu is the smallest province in Papua New Guinea. It is situated in the heart of the Highlands. The terrain is extremely rugged, with many of the valleys inaccessible. Some of the country's highest mountains are in Simbu Province including Mt Wilhelm at 4,509 metres, the highest peak in Papua New Guinea.



Between 2002 and 2005 the APNGIF funded a total of 31 double classrooms and 69 teachers' houses at 49 primary schools scattered across Simbu Province, one of the poorest provinces in PNG.

The proposal for APNGIF funding (phase 1) from the Simbu Provincial Government said that, '*Most schools (in Simbu) have had no new infrastructure for 20 or 30 years*'. The goal set for the Program, and for the subsequent phase 2 was, '*To replace bush materials, semi-permanent and colonial classrooms with permanent ones to make the learning environment more attractive and thereby conducive for the students to learn and teachers to teach*'.

Sixty four local contractors completed the erection of pre-fabricated houses and classrooms at the 49 schools spread across the province. It was an enormous task but both phases were completed successfully. Most stakeholders say the success is due to the project management skills and persistence of one man. If ever the importance of good project management was evident, this was the Program.

Lawrence Koni tells it the way it was for him.

'My name is Lawrence Koni and I am a teacher by profession. I went to Australia, did a uni course there. When I came back I was looking for something challenging. The APNGIF program had started. I was one of the first to write a project proposal'.

One of the remarkable things about the Program was the way in which it utilised and built community expertise. As many contracts as possible were given to companies local to each school area. This resulted in Lawrence managing 64 different contracts.



Lawrence (far right) and others at an opening for one of the schools.

'Our program was unique because it had so many small contractors. It was K10.6 million, it was a lot of money. Simbu had no track record in managing multi-million kina projects. The APNGIF gave us the first K3.2 million and then we wrote the proposal for the second phase. We used about 60 local contractors'.

Pre-cut materials were transported in containers to a central depot at Kerowagi and delivered from there to the building sites. Some sites were very remote and as Lawrence says, dispersed across the Province. Some were only accessible in dry weather. The logistical problems were huge.

'The Project extended to the four corners of the Province. The roads, oh you couldn't believe the roads, they were terrible. We had a lot of blockages on the road, landslides. If they encountered such a problem they had to make sure that nothing happened to the vehicle or to the property.'

It was quite a job, a huge job. We would work seven days a week, there was no rest for us. You drove five hours to one district and then next day you would drive another six hours to another. It paid off'.



Project vehicle experiencing terrible road conditions.

PROGRAM DETAILS

Name: Primary Infrastructure Development Program Phase 1

Number: 030

Proponent: The Simbu Provincial Government

Sector: Education: Basic

Location: Simbu, Simbu Province

Duration: August 2001 to December 2002

Expenditure: K3,250,100 + K30,000 (met by SPG)

Program description: Construction of new staff houses and classrooms.

Name: Primary Infrastructure Development Program Phase 2

Number: 030

Proponent: The Simbu Provincial Government

Sector: Education: Basic

Location: Simbu, Simbu Province

Duration: August 2004 to September 2006

Expenditure: K7,439,992

Program description: Construction of new staff houses and double classrooms.

Community response

The local communities become closely involved in the new buildings, helping on site and, if necessary, providing 'transport' for building materials when roads were unpassable.

'One of the primary schools is about 8 kilometres up the mountain and two of the bridges were washed away. There was no way to get in. So I sent the word out, look, its your school, its up to you, you get down there and get the stuff across the river.'

They came in their hundreds, they got up at 5 o'clock in the morning, they walked to the school, they walked to the Kerowagi station, they loaded the building materials onto their shoulders and they walked back up the mountains singing as they climbed, rejoicing. It was about 8 kilometres up hill. It was inspiring'.

There were other logistical obstacles to progress. However, by asking warring tribesmen what they wanted for their children, Lawrence overcame unexpected disruption to the Program.

'One time, I put two buildings at one school and two buildings at another school. They were different tribes' schools. While the contractors were there the two tribes were trying to have a war. So I got out and I yelled at them, you guys want development or you want to fight? I told them, look we are living in the modern age. If you guys fight here, your children will come fighting, but if you stop, your children will be educated. We want to bring development here, but you guys are still fighting. What the hell good is that?'

So they got together and sorted it out. They stopped. The leaders came to us and said they were happy for the schools'.

Women contractors

Funded organisations are required by the APNGIF programs to ensure there are opportunities for women. In Simbu, Lawrence had a number of women contractors. Lawrence believes the experience gained will stand them in good stead in the future.

'We had some very bad contractors and we had some very good contractors. And we had some good female contractors as well. They were very good, they are good managers, they were out on site, they did a very good job. And in future projects and opportunities they'll be doing very well'.

Pictures from left to right:

1. Jubilant parents reach their destination with building materials.
2. Old classroom at Numunma Primary School, Kerowagi District.
3. New teacher's house in remote Simbu.
4. Off-loading building materials from the container.



1



2



3



4

The excitement of solar lighting

Thanks to the Program a large number of schools now enjoy solar lighting. Some communities had never had power before. Villagers were proud and excited about the lights.

'All of our project schools got solar power. When we went out with the contractor to install solar lighting everyone would get together and by afternoon the contractor would put the light on and some of the mothers and the old folks would shed tears. They said they had waited so long for lights. Even in the bush areas now they have lights'.

Lawrence looks for a new challenge

A number of head teachers and the Department of Education in Simbu have acknowledged Lawrence's achievement in successfully implementing and managing the Program. It was one of the most complex and demanding of the APNGIF programs. Lawrence is pleased with the outcome and he is now looking for another challenge. He says there is a lot left to do in Simbu.

'If there is any more opportunity to do more documentation, bring more development into the Province, I will do it. All the high schools need upgrading, all the rural nurse centres, technical schools, some of the other primary schools. There's a lot to be done in Simbu. I would like to take on another project as big as the last one, I like challenges.

Simbu is the poorest province. I call it the lost frontier for development. I think that is my future. I don't want to do something small'.

Fighting for education in the Southern Highlands

‘Many students still walk to school but if there is a tribal fight on the road, they have to find another way, going through the bush. There is a girl who hasn’t seen her mother for two years because there was fighting. For the kids these are much better conditions than anywhere else in the province...’.



Students at Tari Secondary School, 2006.

Tari Secondary School is in the Catholic Diocese of Mendi in the Southern Highlands. The area is marked by periodic tribal fighting, polygamy and segregation of unmarried men and women. Roads are generally poor in general and the province is considered one of the least developed in PNG. When the Program proposal was presented to the APNGIF in 2002, education in the Southern Highlands was in disarray.



Most results from the July 2002 general election were declared null and void and tribal fighting had led to a breakdown of law and order. The Provincial Education Office and all provincial high schools except Tari were closed for much of the latter part of that year.

Prior to the redevelopment program the school had a capacity of 480 students. The pressure to accept displaced students and a provincial promise of free education saw numbers rise with class sizes up to 56 students and doubling up in dormitory beds. By upgrading to secondary school - dropping grades 7 and 8 and offering grades 11 and 12 - Tari would effectively lift some of this pressure. To cope with the change to full secondary status with years 11 and 12, new dormitories, classrooms, science laboratories and educational resources were required. The school needed better security, especially for the girls, an upgraded hydro electric system, overhead lighting and new septic tank and water systems. Teachers needed new and refurbished houses.

The APNGIF program provided over K10 million and by October 2005 the upgrading of Tari Secondary School was completed.



Tari Secondary School campus.

Better safety for girls

A big feature for the girls was the increased security gained from fencing around their new dormitories. The lighting around the campus also helped them move safely from classrooms to dorms after dark. Feeling safe has helped improve their academic performance. Father Peter Michalski from the Diocese said,

'Certainly the positive changes will be the girls. Now every night they can study in their classrooms if they wish instead of being afraid to go there. They have the fence around the dorms so they feel safe. Sister can go there and spend time with them. There is a big improvement with the girls. It's a behaviour improvement and academic improvements in general. We see this from the results after the examinations'.



Girls in their new dormitory compound.

PROGRAM DETAILS

Name: Redevelopment of St Joseph's Tari Secondary School

Number: 022

Proponent: Catholic Diocese of Mendi

Sector: Education: Secondary

Location: Tari, Southern Highlands Province

Duration: April 2003 to 30 September 2005

Expenditure: K10,653,407

Program description: New specialist and other classrooms dormitories, teacher houses and utilities.

Pressure on student places

Since the upgrade Tari Secondary School has faced pressure to enrol beyond capacity. Partly this is because other secondary schools in the province are poorly equipped and partly because it is now seen as safe for girls. Parents are moving into the area to get their children into the school.

'The number of students is growing. This was the purpose of the project. We have demands for another 500 but we can't take them. So they come to Sister and say, OK we are from Tari area, and we have to be here in your school. It is a big problem that is becoming even bigger, with people moving into the area so their kids can go to Tari Secondary School'.

The Program was finished in 2005. The data in the table below shows the pressure on accommodation in 2001 that prompted the Program proposal. The enrolment of grades 11 and 12 in place of grades 7 and 8 occasioned the lower overall numbers in subsequent years. The table also shows the growth in student numbers from 2004 onwards and of particular interest, the strong pressure for students to board rather than attend as day students. In 2006 the ratio of

Total student numbers

Year	Total students			Ratios	
	Male	Female	Total	Boys to Girls	Boarders to day
2001	352	246	598	1.4:1	1.9:1
2002	308	167	475	1.8:1	1.9:1
2003	322	175	497	1.8:1	1.4:1
2004	306	218	524	1.4:1	2.6:1
2005	285	187	472	1.5:1	2.3:1
2006	286	238	524	1.2:1	2.6:1

Source: Tari Secondary School data.

girls to boys improved, probably as a result of the increased security around the school and the girl's dormitories.

The way in which student numbers fluctuate reflects economic down turns and tribal war deterrents to enrol.

Many students walk long distances to the school, particularly the boarders at Tari. Students may walk from valley to valley, and sometimes with tribal fighting the journey is so unsafe that girls stay at school rather than try to go home for holidays.

'Many students still walk to school but if there is a tribal fight on the road, they have to find another way, going through the bush. There is a girl who hasn't seen her mother for two years because there was fighting. She couldn't walk and she couldn't take the PMV bus because of the tribal fight. She was afraid. A message came from her mother saying, "please don't come; tribal fighting". Or just a rumour of problems, they are very afraid. If it is too dangerous they will stay at the school'.

Improved facilities means better performance

Teachers believe that they and the students have greatly benefited from the APNGIF program. In other schools, very high class numbers are the norm, and teachers often have to double up in the available houses. *'For the kids there are much better facilities than anywhere else in the province. Some of the others have classes of 70 for instance, and four teachers in one house. There is a good library with plenty of books. Now they feel free to walk at night, 7 to 9pm is night study in their classrooms.*



Girls in one of the new dormitories.

There is the lighting, the back up generator, none of the other schools have these. With the fencing no one can walk in and out. The girls are studying a lot better. The academic achievement for 2005 was up, for instance, especially in biology for grade 12. The environment is a big factor in better academic achievement'.

Teachers now stay at Tari

Father Peter believes the houses, and the security lighting around them, encourages teachers to stay at Tari.

'The benefit for the staff is the lighting around the houses. Before that the villagers would come in at night, and sometimes get into the houses'.

The housing has also meant that Tari is no longer short of teachers.

'The houses are better furnished too, with a fridge, gas stove, washing machines, and tiled floors. We didn't have many teachers with the old houses but now we have enough. Our teaching load has decreased, we are better prepared, we set tests, and we have time to mark. Here all the teachers have their own house'.

Community support

There is strong and pragmatic support from the local community. The school provides employment for some local people and the increased population on the campus helps the market just outside the school gates.

The community is proud of the school. During the worst of the troubles and fighting, the community asked the school not to close like the other high schools, promising protection to stay open.

A teacher reports, *'The community around the school is very proud. They love it in their area and they like to protect it. The community has been helpful. They want the school to be here. The kids can get a chance at an education. We employ*

some locals, and there is the market outside the gate for the teachers and students. That's how we managed to operate through the troubles when the policemen disappeared. The community said not to close and that they would protect us'.



Sister from the school talking to a vendor at the gate-side market.

Nevertheless Tari is not free from difficulties and is still vulnerable to local unrest. The staff are to be admired for their dedication and persistence. Father Peter says, *'They see it as a congregation, a challenge which they were called to'.* But in spite of being the only high school operating during the worst of the post-election unrest, classes do get disrupted.

Tari Secondary closed

'About 500 Tari Secondary School students will not attend classes at the start of term three.... Tari Secondary was forced to close over the non-payment for security services provided during a student-led protest last October when classes were disrupted for a month. Local youths, members of the Hulia auxiliary police unit and a section of a Tari-based police mobile squad unit provided security at the school to allow students to sit for their final exams. They were paid K9,000 by the provincial education board but demanded for K34,400 as outstanding payment for the services provided. The group stormed the school as the staff and students were preparing to leave for their term two holidays. They told staff and students to leave the premises and not return for term three. Tari Secondary has 506 students from grade 9 to grade 12 with 28 national, expatriate and missionary staff'. The Southern Highlands Governor 'is mediating for the group to allow classes to resume.'

The National, June 26, 2008.

Kerowagi High School – doing well

‘The upgrade of the school has benefited the province and the people, by acquiring an educational facility which will help the younger generation improve their education standards and hopefully their standard of living. The local community is proud to have such a school for their children. Community support has definitely got stronger since the APNGIF program’.



A computer lab being installed.

Improving access to education has been one of the government’s priorities over the last 15 years, since education reform started in 1993. Education has faced incredible growth, doubling the number of students in the first seven years. Over one million students in school now means that many schools are dealing with large numbers of students. Although the main bulk of the expansion came by changing the structure of the school system to start a whole new tier of elementary education, the increased numbers passing through to high schools are fighting for selective places at schools such as Kerowagi High School.



Kerowagi High School is situated in Simbu Province. In May 2002 the school applied for and received an APNGIF grant of just over K4 million. The Program included new dormitories, teachers’ houses, classrooms, ablutions, mess and administration blocks, as well as amenities such as water, generators, vehicles and office equipment, books and computers.

The Program objective was, *'Improving major infrastructure components of Kerowagi High School under a capital works program to ease overcrowding in dormitories and improve mobility in classrooms, provide teacher accommodation and a 900 student school mess'*.

With better and more facilities, Kerowagi planned an increase in student numbers (particularly girls) and higher numbers of grade 8 students being selected to progress to grade 9.

Would better infrastructure alone achieve these objectives? The APNGIF evaluations of the Program, conducted in 2005 and 2007, have the answer.

In 2007, the headmaster said, *'The enrolment for 2007 is 942 students. This compares to 2002 when there were only 530 and 2003 when there were 556'*.

Student data provided by the school points to a 70% increase of students in grades 9 to 12 from 2003 to 2007. The capacity of the school mess, planned for 900, has been exceeded in 2007.

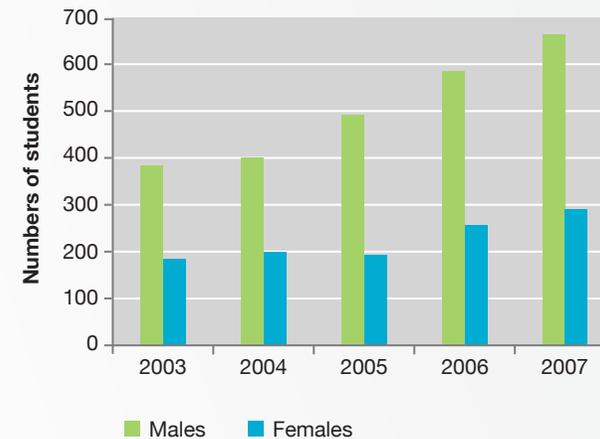
2003 – 2007 Kerowagi High School student numbers grades 9 – 12

	G 9	G 10	G 11	G 12	Total
2003	150	221	93	92	556
2004	162	237	109	102	610
2005	114	193	176	202	685
2006	215	315	150	143	823
2007	261	277	224	178	942
Incr.	+111	+58	+131	+86	+386

Source: Kerowagi High School data.

The planned growth in numbers has been achieved and more, although the proportion of girls has still not reached the target of 50%. The proportion of girls enrolled in 2007 is 30.5%, a fact that a number attribute to *'the customary male-dominated society in Simbu'*. The figure is a slight improvement over 2005 when 28.6% were girls, and 2006 when the proportion rose to 29.6%.

Enrolments years 11 and 12 by gender



Source: Kerowagi High School data.

However the headmaster at Kerowagi High was optimistic.

'Although the number of female students at the school is not 50% the enrolment numbers do reflect quite an increase in the number of female students reaching upper secondary school. The culture is gradually changing in Simbu, where parents are becoming more aware of the need to educate their daughters'.

PROGRAM DETAILS

Name: Kerowagi High School Infrastructure Development Program

Number: 016

Proponent: Kerowagi Provincial High School

Sector: Education: Secondary

Location: Kerowagi District, Simbu Province

Duration: May 2002 to May 2005

Expenditure: K4,294,823

Program description: Improving school facilities and teachers housing.

Students are achieving more

The headmaster and teachers at Kerowagi believe that the improved facilities and resources have encouraged a better academic performance from students. Teachers also believe that they are preparing better lessons and have improved their own teaching skills as a result of better housing and classrooms and access to computers.

The headmaster said, *'Since the upgrading of the school the academic results have continued to improve, which has gained the school a very good reputation. More students are being accepted into tertiary education. Parents are extremely pleased with the school's academic results and have gained much confidence in the school. Employment opportunities may have increased by 50%. It is the best secondary school in the Province'*.

The analysis looked at all the papers sat (a total of 584 sat by 139 candidates). Nearly 90% of papers sat by students who had done all their secondary schooling at Kerowagi High School were passed.

Those included in grade 12 as part of a second selection were less successful but still, nearly two out of three succeeded.

Summary of pass/fail by characteristics of Kerowagi grade 12 students

Characteristics	Total papers sat, all courses	% Pass
Continuing students	384	87
Second selection students	19	63
FODE students	119	61
Repeat students	25	48
	584	

Source: Kerowagi High School data.

Teachers have responded to the improved conditions at Kerowagi. More teachers want to work there, and teacher absenteeism has been reduced. A teacher said, *'There is greater competition for teacher places at the school, performance has improved and we are pleased with the new teaching facilities and the houses'*.

Education personnel have stated that the improved performance of Kerowagi has contributed to an improvement to Simbu's place in national education figures. The academic results obtained by the students, *'Have exceeded all expectations. The academic results gained in the last couple of years have put Simbu province amongst the top achievers in the country'*.

A victim of success

The success of the Program and the improved academic results have impacted on the original intention of reducing overcrowding at the school. Now, more space is needed for the number of students who are eligible or wish to proceed to secondary education, and many parents from outside of the Province want to send their children to Kerowagi High School.



New mess hall at Kerowagi High School.



New teacher houses at Kerowagi.



New ablution block.

Becoming a secondary school

'Hagita is now a top school and sends most of its students to tertiary institutions. This is because of the facilities it has'.



A feast in the making for the official opening.

By 2000, the demand for places in grades 11 and 12 far exceeded the places available in Milne Bay Province. Like many schools in PNG, Hagita High School needed to greatly improve its facilities and resources before it could enrol these upper secondary grades. A Provincial Government spokesperson said, *'The costs of upgrading a school in preparation for accepting upper secondary grades, including infrastructure and school materials, are approximately six to eight million kina. This figure is beyond the capacity of most provincial governments'*.



Milne Bay Province

The APNGIF provided K9.9 million of funding to ensure that Hagita High School could enrol grades 11 and 12. The upgrade took two years, until the end of June in 2004. The Program objective was, *'To provide infrastructure and equipment that will enable Hagita High School to take in years 11 and 12 and to accommodate a larger student population'*. As well, Hagita wanted to achieve the 2014 national target of 45% of grades 11 and 12 places occupied by girls.

The Program was a large one. It provided new 240 bed dormitory space and refurbished accommodation for an additional 200 students. Sixteen teacher houses were built, twelve classrooms were converted and four new ones built. A range of specialist classrooms, a computer laboratory, a library and administration block, kitchen and bakery were included. Security fencing was provided as were upgraded or new power, water and sewerage services. A large range of teaching resources, computers and furniture was provided. The official opening was held on May 8, 2004.

Achieving the goals

The year after opening the new facilities, Hagita had 197 more students than in 2004. This increase has been maintained each year since then. The Headmaster said, *'Children are not going out of Milne Bay to do grade 11 and 12 now. This is a very good impact. It has brought pride to the local community to have such an institution'*.



A new classroom block at Hagita Secondary School.

Student enrolments by year

Grade 9 – 12 students 2003 to 2007			
Year	Male	Female	Total
2003	262	246	508
2005	348	357	705
2006	333	368	701
2007	350	356	706

Source: Hagita Headmaster 2007.

The school is doing well in gender equity, too. Since 2005, the proportion of girls in grades 11 and 12 at Hagita has been greater than the national target of 45%.

Percentage of girls 2005 – 2007

Grades 11 & 12	June 2005	May 2006	Feb 2007
Total students	205	216	220
% females	46.3%	46.3%	49.5%
% males	53.7%	53.7%	50.5%

Source: Hagita Headmaster 2007.



The new science, computer and library complex.

PROGRAM DETAILS

Name: Infrastructure Upgrade Program

Number: 017

Proponent: Catholic Diocese of Alotau

Sector: Education: Secondary

Location: Alotau, Milne Bay Province

Duration: May 2002 to June 2004

Expenditure: K9,945,235

Program description: Building new school facilities, teachers' housing and providing school resources.

Computer impact

A teacher who came to Hagita just as the Program was completed in 2004, reflects on the impact from access to computers. *'I see the biggest impact from the computer set-up and equipment. The teachers are learning how to use them to prepare their lessons. Since 2004 teachers can cover all of the topics because of the access to the computers. We are teaching the students computer skills, something many have never had before. In Milne Bay Province there are so many industries with computers and it lets our students get jobs there. And when the students get to university they do not find it hard to make the transition'*.

Most students agree, *'The new facilities have really helped me to improve in my studies, especially the library and the computers. I see that nowadays there are many jobs that rely on computers. Also in the universities where nearly all work is done on computers'*.

The Provincial Administration are convinced that access to computers has improved students' potential in the workforce. *'Job opportunities are now better for our students. The use of computers has opened up their options. Students have first hand experience with keyboard use. They come into contact with computers as early as grade 9, unlike in the past when there was hardly any contact with the computer'*.

Student achievements

Students and teachers alike say that the new facilities have helped them improve their performance. Teachers are better prepared for classes and are happier with their new houses. Students appreciate the range of up-to-date facilities available to them – the library, the science laboratories and the comfort and security of good accommodation and fencing.

Marks are going up. A student says, *'The facilities have done much to improve my studies. Especially the library, chemistry, physics, biology and computer labs and the dormitories. They have made a great impact on my chances for good employment'*.

The school is achieving better than average results, as the standardised scores for the two years after the Program was completed, have shown.

Hagita grade 12 standardised scores 2005 – 2006 and Provincial Score

Standardised scores 2005 – 2006				
Year	Chem	Phys	Econ	Geo
2005	47.52	48.14	51.05	52.48
2006	55.14	52.20	57.66	56.65
Milne Bay 2006 Provincial Score 49.47				

Source: Hagita Headmaster 2007



A new science laboratory.



New Hagita library.



Practical skills workshop.

According to a senior teacher, better scores mean a stronger chance of Hagita students getting into tertiary education. *'In other secondary schools most students do not get an offer for university. Here they do. In 2005, Hagita topped the country in Maths out of 72 secondary schools in PNG. In 2006, our results improved from those of 2005. I think our teachers and students can do better because the buildings are good. So you can see the effect on learning. I am very happy to be a teacher here'*.

A provincial education spokesperson believes that the APNGIF program has benefited the province as a whole. *'It has given the province an advantage in education. The provision of secondary education in Milne Bay Province is now well up with that in PNG'*.

One of the goals of the Provincial Government was to improve the lifestyle within Milne Bay Province. The Administration said,

'We see Hagita Secondary School as helping liberate the people through education and as such contributing to this goal'.

A student has the last word. *'The facilities attract good teachers from around the country to come to Hagita. I think it is one of the best schools I have come across because everything I need is always here and the type of teaching I get is what I deserve to get. Hagita is now a top school and sends most of its students to tertiary institutions. This is because of the facilities it has'*.



The new practical skills block.

Protecting a nation's history

'The provision of new facilities to preserve the Noser Collection is heaven sent. This collection is rare and unique – it is the history of PNG. The oldest book is 226 years old, about a journey from Paris to Papua New Guinea'.



Visitors examining a rare book from the collection.
(Photo courtesy of Divine Word University).

The Catholic Church has been a strong supporter of education in PNG for many years. Often setting up in remote, rural sites, the church has been the backbone of high quality rural education. With the opening of Divine Word University in 1977 Catholic education took on a much more powerful role in education in PNG.



At the time of the proposal to the APNGIF in 2000, there were eight academic departments at the DWU and they were projecting enrolments of 980 on the campus and nine new courses. In 2004 there were 765 students on campus and 29 courses offered. By 2007 student numbers hit 1099 and the DWU was offering 40 courses.

Without the APNGIF-funded building program, this growth would not have been possible.

The Program funding was K12.5 million. The APNGIF built a large, two-storey library with archives, computerised research facilities, quiet study areas and a small lecture theatre. The Program also included a new auditorium with seating for more than 300 students. Previously, lecturers had taught in old primary school classrooms seating only 30, drastically restricting the numbers who could attend.

The auditorium was opened in September 2003 and the Friendship Library on 28th April 2004.



Main entrance to the Friendship Library.

The library as backbone

The backbone of a University is the library, including its archive. The objective of the APNGIF program at DWU was, *'To improve access to quality educational, training and research facilities for the people of PNG, especially Madang Province, by constructing a high standard tertiary library and lecture theatre'*.

It was said at the opening ceremony that, *'The Friendship Library symbolises the friendship between the people of Australia and the people of PNG'*. Extracts from the library's opening ceremony capture this relationship.



Inside the new library.

'Most of the money for the construction of the library came from the Australian taxpayers' pockets. This library is an expression of the relationship between the two nations. The library is built with a lot of glass all around and inside. You can see through this glass. It's a very transparent building. The same goes with the relationship between the people of Australia and Papua New Guinea – the relationship should be as transparent as the library.'

The second reason for the library to be built with a lot of glass is the power of knowledge which students will gain from this building. When students sit in this building they will learn from books and at the same time they can be inspired by the universe and the outside nature which can be seen through the glass'.

PROGRAM DETAILS

Name: Library and Lecture Theatre Program

Number: 003

Proponent: Divine Word University

Sector: Education: Tertiary

Location: Madang, Madang Province

Duration: November 2002 to June 2004

Expenditure: K12,651,156

Program Description: Construction of library and lecture theatre.

The Noser collection

The Noser collection was founded by Father Michael Morrison (1927-1984) to commemorate Archbishop Adolph Noser, the first Archbishop of Madang. It is one of the five best collections of New Guinea materials in PNG. It includes approximately 14,000 catalogued books, serials, maps and rare published material and some original documents gathered from local sources. Holdings range from mission letters to local grammars.

Before the new library was built the collection languished in boxes in an old classroom. It was deteriorating badly. The new archive space is purpose built. The Librarian says, *'The provision of new facilities to preserve the Noser Collection is heaven sent. This collection is rare and unique – it is the history of PNG. The oldest book is 226 years old, about a journey from Paris to Papua New Guinea.'*

Previously the collection was stored in an ex-classroom with a leaking roof and broken down air-conditioner. When we started to bring the books up here we found mould, rats and pages stuck together'.

Relocating the collection

It has taken a while to unpack, catalogue and restore the collection.

But now that it is restored and housed appropriately, the DWU is host to an ever growing number of researchers interested in PNG's history.



The Noser collection moving in.

'Now we get researchers from all over the world, especially, Germany, Austria, the UK, Australia, Switzerland. Many of them are anthropologists.'

Heidelberg University has become an affiliate, so has Leipzig University. We have German students here to translate some of the materials'.

Since the relocation, a number of other collections have been donated to DWU. The Librarian believes this is because people can now be confident that their donation will be cared for and preserved. Older manuscripts and books have been discovered and added to the shelves.

'Since having room and shelving to store the collection, books have been discovered dating back to 1835 which would have been brought over to PNG with the first German missionaries in 1846. These pre-date our previous oldest books in the collection'.

The Librarian is skilled in the processes needed to maintain the collection in top condition. She has trained other staff in this.

The collection gets 'kid glove' treatment. *'Very strict control is placed on the handling of the collection. We can't put a value on some of the old parchments, its irreplaceable stuff. Gloves are supplied and must be worn when handling the material. For the older more fragile items, a mask must also be worn. The new system will ensure that damage is severely prevented in the future'.*

Added value for students and staff

The Noser Collection has become a 'Mecca' for international researchers and educationists who offer lectures and courses for the DWU students and add to academic debates within the University.

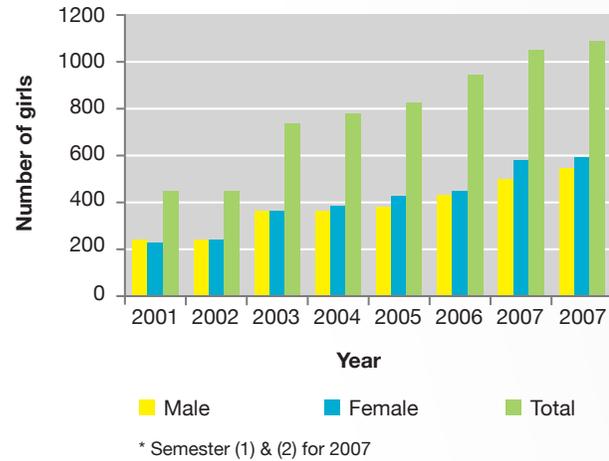
'The library area often is packed with users now that it has been 'discovered.' The main use of the collection is for academic reasons, but more and more people are coming in for interest rather than for academic purposes. Contact is being made more regularly now from overseas people who are inquiring about the possibility of coming to Madang to access the material'.

Important impacts of improved facilities – women and post-graduate students

The reputation of DWU and its superb facilities is widespread. Divine Word University has enjoyed strong growth in enrolments since the completion of the APNGIF program. In no small part, this is attributed to the resources now available.

Of particular interest is the prevalence of women students, something that is encouraged strongly by the University. The ratio of women to men has been growing since 2003, when the gender balance was about equal.

Gender breakdown of students at DWU 2001–2007



Source: Divine Word University.

The number of post-graduate students is now believed to be the highest in any University in PNG.

There were:

- 197 Masters students in 2007 compared to 112 in 2006
- 17 Doctoral students in 2007 compared to 6 in 2006.

This is of significant importance for the future of PNG. The president of the DWU believes that the potential of these Masters and PhD students for good governance is enormous.

‘The value of access to up-to-date resources can’t be measured, but the long term impacts of what we have here include better governance for PNG, and economic development, with people better trained and skilled’.

‘DWU has become a ‘Mecca’ for international researchers and educationists, who use the Noser Collection’.

Pictures from left to right:

1. Cutting the ribbon ceremony, Library opening.
2. Open and ready for business.
3. Crowds on opening day.
4. Small lecture theatre in the new library.



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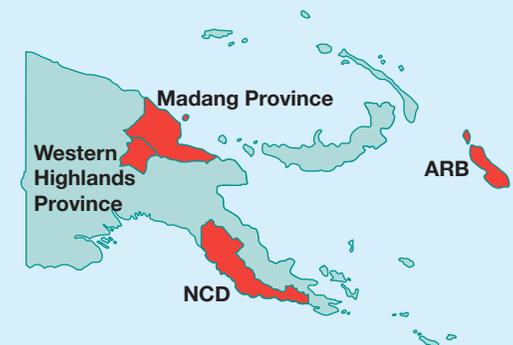
A second chance at education

'The Bougainville Education Board decided that if you want to come back into education, you can. So a lot went back for years 7-10 and can now be enrolled in years 11 and 12. This is a group of people who would not have got anywhere otherwise'.



Kokopo Distance Education classroom.

For many years, Papua New Guinea had a highly selective, 'push-out' form of education. Children who did not pass through an examination-driven system were simply categorised as drop-outs. The number of spaces offered at each level was increasingly limited the further you got through the system, so only a small percentage made it through to high school and pre-university selection.



For the 'drop-outs', that was the end of their education. There were no possibilities to re-sit a year or go to a private school.

However, in recent years an increasing number of private schools and colleges have started to offer alternatives. The University of PNG now has a number of campuses offering distance education across several provinces.

The University of Papua New Guinea is PNG's longest established university. The APNGIF program focused on training UPNG lecturers to write syllabus materials and courses, and on providing five satellite campuses with computers and other equipment to help deliver courses to external students.

UPNG's development of its capacity in distance education is a significant step in providing opportunities for social and economic improvement. The University's broad objectives were, *'To increase the supply of high-level trained people in PNG and improve the performance of the work force and individuals as well as improve access to higher education and life-long learning.'*

This accords with PNG's Medium Term Development Strategy (MTDS) 2005-2010 in which it is stated, *'While basic education will be the foremost priority of the Government, the MTDS acknowledges the need to ensure that PNGs brightest and most talented students had the opportunity to receive a quality higher education'*. The MTDS also says that *'Only 50% of adults in PNG are functionally literate'*, a situation crying out for alternative access to basic education.

UPNG received funding of K4.5 million from APNGIF and the Program was completed at the end of December 2003.

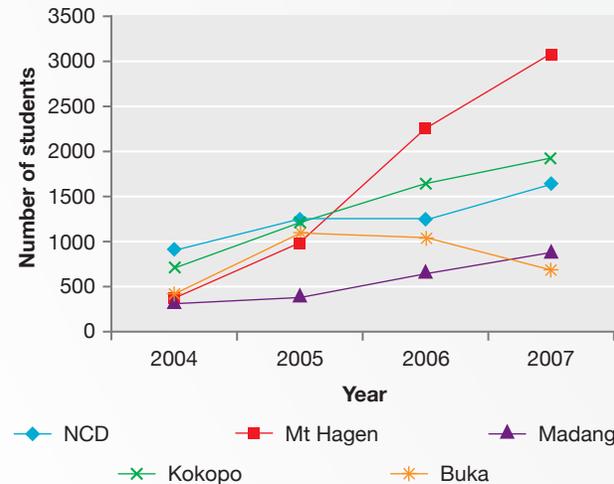
Second chance students

Primary and secondary education in PNG is expensive and under-resourced. In 2008 national transition rates from grades 8 to 9 (high school) are around 50% and for grades 10 to 11 (higher secondary) around 25%. Many, especially girls, are unable to complete schooling beyond year 6 or 8.

Tertiary and community studies through the Open Colleges offer a second chance to hundreds of young people.

The number enrolling with UPNG for a Certificate in Tertiary and Community Studies (CTCS) has sky-rocketed since the APNGIF program was completed, especially in Mt Hagen and Kokopo. These are people who desperately need more education and better skills to improve their lives.

CTCS enrolments by campus 2004 – 2007



Source: UPNG Distance Education.

PROGRAM DETAILS

Name: Capacity Building in Distance Education

Number: 005

Proponent: University of Papua New Guinea

Sector: Education: Tertiary

Location: NCD, Madang, Kokopo, Mt Hagen and Buka Open Campus

Duration: February 2001 to August 2004

Expenditure: K4,504,802

Program Description: Provide five Open Colleges (Madang, Buka, Mt Hagen, Kokopo and National Capital District) and facilities to do the extended studies/courses.

In Buka the Open College is catering for people who have experienced social dislocation and no access to education. Hundreds are looking for a new start as they recover from the uprising and civil war in Bougainville. An Open College staff member said, *'People are looking at alternatives to do further studies. There has been an increase in intake for trades, those with poorer overall percentages.'*

A spokesperson of the Department of Education supports this belief. *'Bougainville has a lot of catching up to do. Most systems in Buka did not come back until 2000. Distance education assists us very well. The Open College enrolls people for a second chance. A lot went back for years 7-10 and can now be enrolled in years 11 and 12. In the early years of the Distance Education Program it was mostly older people but now it is providing education for younger people. This is a group of people who would not have got anywhere otherwise.'*

Upgrading qualifications and skills

For other people it was a chance to upgrade existing knowledge and qualifications by enrolling in diploma or degree courses.

One mature-aged student working within the management team at the Mt Hagen market, said, *'The service is an eye-opener. I first enrolled in 2005, and I am doing Public Policy Management. I am a family man and I can't go and enrol on the main UPNG campus, so this gives me the ability to upgrade and stay viable in the job market at 55. I couldn't do it if the Open College was not here. In the end it will help me stay competitive in the job market. My interest is in administration. A lot of people in the public sector should do it'*.

Improved public sector

According to Campus Directors in Mt Hagen and Buka, many public sector personnel are doing it. Provincial administrations as well as the commercial world are being enhanced by their staff having access to further education.

'In Mt Hagen we've got public servants, teachers upgrading for secondary schools, people from the corporate sector, politicians and local leaders as well as young people looking for a second chance. Everyone is upgrading'.

Pictures from left to right:

1. Madang Distance Education campus.
2. New computer laboratory at Buka Open Campus.
3. Computer laboratory being set up in Mt Hagen.
4. Computers in use at Buka Open Campus.



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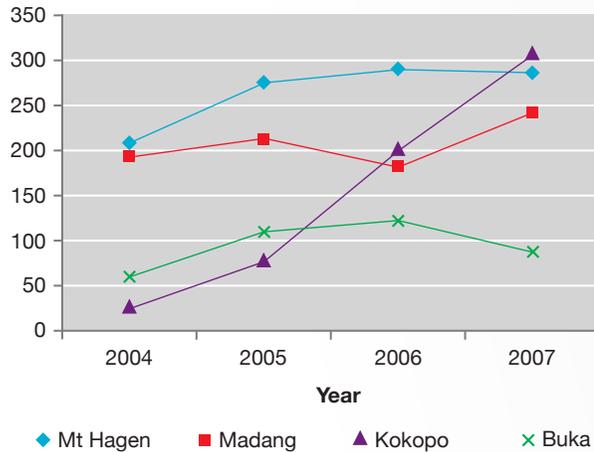
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In Port Moresby (NCD) the number of students enrolling in diploma or degree courses has risen from 1,266 in 2004 to 2,943 in 2007. The growth in provincial campuses is also strong.

Enrolments in degree/diploma courses
Provincial Open Colleges 2004 – 2007



Source: UPNG Distance Education.

The Department of Health in Bougainville supports their staff to enroll. *‘We have a number of officers attending courses, more than 10, we are benefiting from distance education. If the campus wasn’t there they would have to go to Port Moresby, which is really expensive. Now they can keep working and go after work.’*

A Mt Hagen student said, *‘Thirty teachers in all from Jimi have come here to get a degree. I am one of them. Now I can be a modern teacher and teach in higher secondary schools’.*

Another Mt Hagen open campus degree student tells his story.

‘I am working in the Health Department and it will help me in my job. I am doing a Public Health Management course. I am self-sponsored. If I had to go somewhere else I would not be able to because my work would not allow me. I started this course last year. I will finish next year. It is very expensive, it will cost me K9000 so it is very hard. But it is worth it because it helps me reach beyond my expectations’.



Buka Distance Education Campus.



Open Campus new computer and lecture block in Buka.

Training world-class seamen and women

'The really big changes in this place give us pride. Thinking back 10 years, it was like a high school. Now I feel I can stand up and say I have the best qualifications, because of the facilities here'.



Students bringing a ship in to the simulated Sydney harbour.

In recognition of the importance of the maritime industry in the Pacific region, the PNG Maritime College has received two phases of AusAID funding over the past 13 years. Between 1995 and 1999 a grant of K10 million gave the college the capacity to deliver internationally accredited training programs from entry level to Master Class 1 and Engineer Class 1 as well as highly specialized short courses focusing on maritime distress and safety situations.



The project equipped the college staff for developing and teaching international level courses.

Nevertheless the college still lacked key nautical equipment to deliver the courses and the college facilities were largely inadequate for trainees and staff. A proposal to the APNGIF was accepted in late 2001 and K6 million was provided to the college to:

- build new dormitories, a recreation room and a fire fighting complex
- refurbish existing dormitories, staff offices and kitchens
- install a computer network, buy engineering equipment and textbooks as well as nautical studies equipment and training materials.

The impact of the APNGIF program is described by a tutor. *'We only taught in the classroom and our students were told that the only way to advance was to go to sea. Now we have the facilities which are like a full ship's operation including the engine room, using the simulators. Now we can get to Class 1 in a much shorter time. Our facilities are almost world class and they are used pretty much the whole time'.*



New student dormitory.

Apart from Australia and New Zealand, there are 10 other maritime colleges in the Pacific Region. With the completion of the APNGIF program PNG Maritime College is now the only Pacific Island Maritime College out of the 11 training establishments that can take a student through to Master and/or Engineering Class 1 with International Maritime Organisation (IMO) certification.

The college has been recognised in the 2007 ADB study *'Skilling the Pacific'*.

'It is the only Pacific Maritime College which can provide the complete range of STCW-95 compliant maritime courses from Class 1 Master and Class 1 Engineer to ratings. The Madang College... has an excellent reputation with international shipping lines. The college trains 90 – 100 ratings per year'.

Location and level of training offered by Pacific region Maritime Training Centres

Country	Highest level of training taught
PNG	Class 1 Master and Engineer Ratings
Vanuatu	Master <500GT and Engineer <500kW Ratings
Fiji	Class 3 Master and Engineer Ratings
Solomon Islands	Class 4 Master and Engineer Ratings
FSM (Yap)	Class 5 Master and Engineer Ratings
Samoa	Class 5 Master and Engineer Ratings
Tonga	Class 5 Master and Engineer Ratings
Cook Islands	Class 5/6 and Ratings
Kiribati	Ratings
Marshall Islands	Ratings
Tuvalu	Ratings

Source: Skilling the Pacific, ADB 2007.

PROGRAM DETAILS

Name: Upgrading of PNG Maritime College Facilities and Equipment

Number: 011

Proponent: PNG Maritime College

Sector: Education: Tertiary

Location: Madang, Madang Province

Duration: February 2002 to May 2003

Expenditure: K5,901,800

Program Description: Construction of new college buildings, facilities, and accommodation for staff and students.

Encouraging women mariners

The college has focused on improving gender equity in the maritime industry. The APNGIF program included providing women's accommodation on the campus in Madang. By 2007 the college had 15 women students, four in officer training and the college has the distinction of training the first female cadet appointed by a PNG shipping company. The principal is very proud of the accomplishments of these young women. *'One of our women students was flown to Norway as chief officer to bring back a tug boat, a huge loaded barge, to PNG. We have a girl in Russia. Gradually it is happening'*.

Ever increasing numbers

The APNGIF upgrade has encouraged PNG shipping companies to sponsor more and more of their seafarers to train at the Madang-based Maritime College. These companies no longer face the high costs of training in Australia or New Zealand.

Shipping company sponsorship of students

The principal noted the increasing demand for officers in the Pacific, and the big increase in numbers enrolled at the college. *'There are an increasing number of ships around PNG and they are running out of officers. Student numbers have nearly doubled for us and the students we produce are getting the same standard as at Australian Maritime College'*.

The table below shows the number of students from 2004 (214) to 2007 (368). Interestingly, it shows a jump in the number of public-sector sponsored students from 10 in 2004 to 36 in 2007. Private sector sponsorship (mainly shipping companies) has increased by over 80% from 131 in 2004 to 243 in 2007.

Number of students by sponsorship details, 2004 – 2007

Sponsor	2004	2005	2006	2007
Self	73	96	96	89
Public sector	10	19	15	36
Private sector	131	179	215	243
Totals	214	294	326	368
% growth over 2004		37%	52%	72%

Source: PNG Maritime College.

An increasing number of students come from other Pacific countries, Fiji, Solomon Islands, East Timor and Vanuatu.

Shipping companies and students are confident in the quality of the training at PNGMC, particularly with the engine room and navigation simulators. One student recently said, *'The new upgrading has motivated me to come back. Now I plan to go all the way to Engineer Class 1. The engineering training complex is very good, we now meet IMO standards. So it has improved a lot'*.

The new engine room is, *'Exactly like the engine room of a ship. All ships are not the same but the setting up is'*.

The navigation simulators are also providing vastly improved training. Students are better equipped to work outside of PNG coastal shipping, a matter of pride for the college. *'Most of the guys learning from this new facility are advancing outside of PNG ships. I personally know eight who are working abroad. For instance one trainee delivered a ship from South America, via Australia and international waters'*.

Fire fighting

Fire at sea is a terrifying experience. Part of the APNGIF upgrade included a fire fighting complex. An existing unit was modified to simulate a ship's engine room, and a new unit simulates accommodation space on a ship.



Students enter the simulated crew quarters to deal with a fire. Photo: Courtesy of Maritime College.

Trainees are exposed to real fire in both units and are trained to recognise how to deal quickly and effectively with the dangers.

The college principal is delighted with the outcome of the AOPGIF program.

‘Overall the aims of the APNGIF program have been met in full. We met the requirements of the IMO in February 2006. It was our first external audit and we passed with flying colours. PNG is now on the IMO ‘white list’ for excellence in maritime training’.



Fire drill at Maritime College. Photo: Courtesy of Maritime College.

Export earnings

The PNGMC has been successful in winning tenders on internationally competitive bids. The college is currently implementing an Asian Development Bank funded contract with the South Pacific Commission in Suva, Fiji, to develop maritime courses for the SPC. Three immediate outcomes from this contract were cited:

- exposure of PNGMC academic staff to consultancy
- an opportunity for the academic staff to broaden their perspectives on maritime training issues within the region
- realisation of a long-term objective of the PNGMC to be less reliant on grants from the national government.

A final word

The APNGIF program focused on improving the effectiveness of institutions by working with organisations that already had sound management and financial structures.

However, in any program as diverse and far-reaching as the APNGIF, there are many unexpected outcomes and impacts often reaching far more people within communities than was originally anticipated.

So in closing we'd just like to highlight a few of these unexpected outcomes.



Mount Hagen now has a cadre of 'taxi boys' to support the new market. *Pride of Mount Hagen.*



A water project on the island of Buka also improved family relationships. *Safe water, sweeter air.*



Feeder roads for oil palm growers have helped reduce crime. *Feeder roads for oil palm growers.*



A new market in Enga helped to reduce inter-tribal rivalry and fighting. *The market that changed lives.*



Two new classrooms and a teacher's house at a local school prompted a community to plant more coffee. *Women and girls in education.*



Education support materials for primary and secondary schools evolved into university degree course materials. *Reaching the community with conservation awareness.*



**Appendices -
Programs without
stories in this book**

Health

Alotau General Hospital

PROGRAM DETAILS

Name: Alotau General Hospital Facilities Upgrade

Number: 025

Proponent: Alotau General Hospital Board of Management

Sector: Health

Location: Milne Bay Province

Duration: June 2003 to May 2006

Expenditure: K9,331,331

SUMMARY

The upgrade included an operating theatre complex fully equipped, a surgical ward, eight nurses' units, one house, two duplexes and a six room hostel, five other staff houses and refurbishing or upgrading of the laundry, kitchen, incinerator and water and power.

ACHIEVEMENTS

- Increase in operations from five to 15-20 a day.
- Improved patient recovery rates.
- Increase in number of supervised births.
- Increased number of referrals.
- Increased quality of hospital based services.

Mingende Hospital

PROGRAM DETAILS

Name: Rural Health Services Capacity Building Program (Mingende)

Number: 032

Proponent: Simbu Church Health Services

Sector: Health

Location: Simbu Province

Duration: November 2004 to June 2007

Expenditure: K3,516,386

SUMMARY

Power, potable water and transport facilities to rural health centres and aid posts. X-ray, dental and pathological facilities and resources at Mingende rural hospital. Also an isolation ward, ambulance, surgical theatre equipment, medical waste disposal facility and improved rainwater storage.

ACHIEVEMENTS

- Outpatient numbers grow from 29,662 in 2003 to 41,086 in 2007 at Mingende hospital.
- Inpatients grow from 2321 in 2003 to 2808 in 2007.
- Ante-natal clinic first visits grow from 950 to 1307 and supervised deliveries from 745 to 888 from 2003 to 2007.
- Outpatients at rural health posts grow from 55,973 in 2003 to 62,464.

Kimbe Hospital

PROGRAM DETAILS

Name: Kimbe General Hospital Improvement Program

Number: 037

Proponent: West New Britain Development Corporation

Sector: Health

Location: West New Britain Province

Duration: November 2005 to February 2008

Expenditure: : K6,471,747

SUMMARY

Construction of a multi-purpose specialists centre with dental, x-ray, pharmacy, consulting and medical records rooms, a pathology laboratory, kitchen, haus win and kiosk and public toilets. Walkways, a car park and landscaping were included.

ACHIEVEMENTS

- All infrastructure completed.
- Too early to identify development outcomes.

Kudjip Hospital

PROGRAM DETAILS

Name: Kudjip Nazarene Hospital Infrastructure Upgrade Program

Number: 040

Proponent: Nazarene Health Ministries

Sector: Health

Location: Western Highlands Province

Duration: May 2006 to May 2008

Expenditure: : K6,246,695

SUMMARY

Funding covered four new surgical wards, a dedicated obstetrics ward, a new outpatients building, toilet and ablution facilities, three staff houses, two duplexes and single quarters for nursing staff. The first stage of a new sewerage system was also built.

ACHIEVEMENTS

- All infrastructure completed as at December 2008.
- Too early to identify development outcomes.

Education

Boroko Primary School - phase 1

PROGRAM DETAILS

Name: Education Services Improvement Program, Boroko, Phase 1

Number: 001

Proponent: The Salvation Army, PNG

Sector: Education: Basic

Location: Boroko, National Capital District

Duration: November 2000 to October 2001

Expenditure: K1,281,386

SUMMARY

Construction of 10 classrooms, a toilet block, playground and office block, fit out of a library and provision of books and class sets.

ACHIEVEMENTS

- Roll increased from 408 in 2000 to 528 in 2001 and 598 in 2002.
- Five extra teachers and five extra teacher-aids were employed.
- In 2002, the ratio of boys to girls at Boroko School was 55:45 compared to National Capital District average of approximately 65:35%.

Boroko Primary School - phase 2

PROGRAM DETAILS

Name: Education Services Improvement Program, Boroko, Phase 2

Number: 033

Proponent: The Salvation Army, PNG

Sector: Education: Basic

Location: Boroko, National Capital District

Duration: May 2005 to February 2007

Expenditure: K3,733,594

SUMMARY

The Program was designed to further expand the SA Primary School, Boroko from grade 6 to grade 8 and expand SA Boroko College of Distance Education (Flexible Open Distance Education, FODE) from grade 10 to grade 12. Eight classrooms, four specialist classrooms, a staff room, staff and student toilets, staff and administration offices and power and water upgrades were completed and furniture and teaching resources provided.

ACHIEVEMENTS

- By 2006 enrolments in grades 7 and 8 were 117.
- 70% of first grade 8 students qualify for high school.
- Continuity of study for students achieved in 2007 with first enrolments in high school grades 9 and 10 (99 students).
- Total school roll in 2007 is 843 compared to 598 in 2002.
- Increase in FODE students from 139 in 2005 to 361 in 2007.
- Ratio of boys to girls is 54:46.

Hohola Youth Development Centre

PROGRAM DETAILS

Name: Hohola Youth Development Centre

Number: 039

Proponent: De La Salle Brothers

Sector: Education: Adult

Location: Hohola, National Capital District

Duration: June 2006 to August 2008

Expenditure: K3, 538,700

SUMMARY

New classrooms, tutorial rooms, new workshops and administration centre. Renovations and refurbishment has upgraded a motor mechanic workshop, a library, a further teaching area and back-up power and water. A security fence has been installed around the perimeter.

ACHIEVEMENTS

- The Centre was officially opened by the Governor General of Australia on August 4th 2008.
- 50% of places targeted at young women.
- Increased facilities mean HYDC no longer have to turn away students (over 300 turned away in 2007).

Marianville High School

PROGRAM DETAILS

Name: Development Program

Number: 007

Proponent: Marianville High School

Sector: Education: Gender

Location: Hohola, National Capital District

Duration: May 2001 to April 2004

Expenditure: K5,048,742

SUMMARY

Classroom block, three science laboratories, four staff duplexes and three teachers' houses, a laundry, ablution block, work shed and multi-purpose covered way. Existing dormitories, dining, kitchen, computer rooms, classrooms, teachers' houses repaired. Assembly hall extended and text books, audio-visual equipment, science equipment and back-up generator provided.

ACHIEVEMENTS

- Year 11 and 12 numbers rose from 575 in 2004 to 647 in 2007.
- Year 10 enrolments rose from 179 in 2004 to 229 in 2007.
- 2006 had highest percentage of year 12 selected for tertiary studies of all schools in NCD.

National Research Institute

PROGRAM DETAILS

Name: National Research Institute Infrastructure Development Program

Number: 041

Proponent: National Research Institute

Sector: Education: Policy research

Location: Port Moresby, National Capital District

Duration: November 2006 to January 2009

Expenditure: K6,649,968

SUMMARY

This program, the last accepted in phase 2 of the APNGIF, consists of 10 new offices for research staff, a registration and reception office, administration and conference facility for 240 people, a printing and production facility, four staff units and the upgrading of eight existing accommodation units.

ACHIEVEMENTS

- Program incomplete at December 2008.
- Too early to identify development outcomes.

Law and Justice

National Fraud and Anti-Corruption Squad

PROGRAM DETAILS

Name: RPNGC National Fraud and Anti Corruption Squad Program

Number: 015

Proponent: Royal PNG Constabulary

Sector: Law and Justice

Location: NCD, Western and Eastern Highlands and Simbu Provinces

Duration: April 2002 to October 2005

Expenditure: K6,781,906

SUMMARY

A large new fully furnished and equipped office block in Port Moresby and refurbishment of existing offices in Mt Hagen, Kundiawa and Goroka. Computers and related technology provided and office and training equipment and three vehicles. Professional training cases provided.

ACHIEVEMENTS

- 26 training workshops delivered to total of 319 attendees in 2004.
- Access to computers has increased efficiency of Fraud Squad investigators.

Incentive fund staff 2000 – 2008

The following people have worked for the APNGIF during the years 2000-2008 and have contributed in various ways to the success of the APNGIF and the Programs it has seen to completion.

Ainui Patterson

Allan Warkia

Bill Hamblin

Billie Kila

David Plomley

Debbie Hall

Elise Marjen

Emmanuel Wrakuale

Evelyn Aisi

Evelyn Imarato Oli

Frank Maiolo

Fred Damagu

Janice Bran

Jebson Kare

Jennifer Rush

John Piel

John Sargent

Lisania Boletu

Marilyn Willis

Maryanne Manale

Matthew Greenwood

Nalini Hallt

Nathan Chang

Paul Constable

Raj Patnaik

Raymond Greer

Regina Lei

Roger Bednall

Sandy Bottrall

Steve Nicholls

Stewart Hadfield

Sue Richards

Terri Chala

Willie Koi